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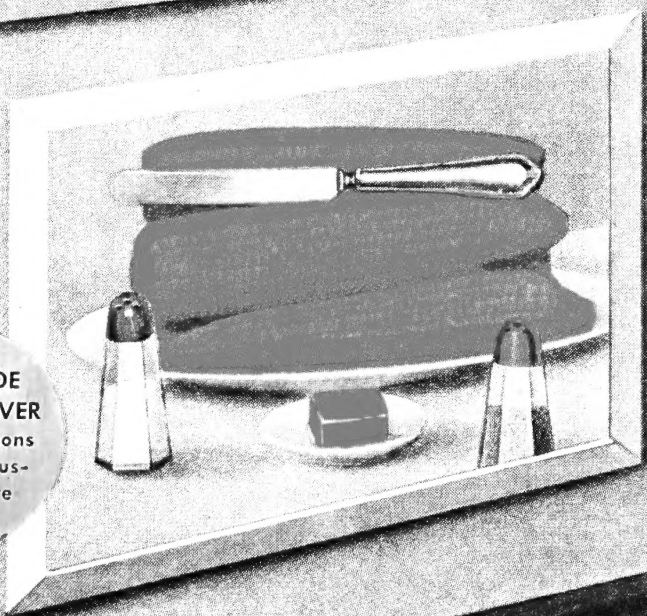
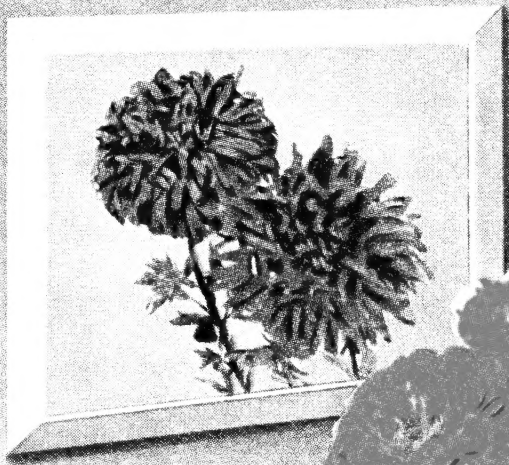
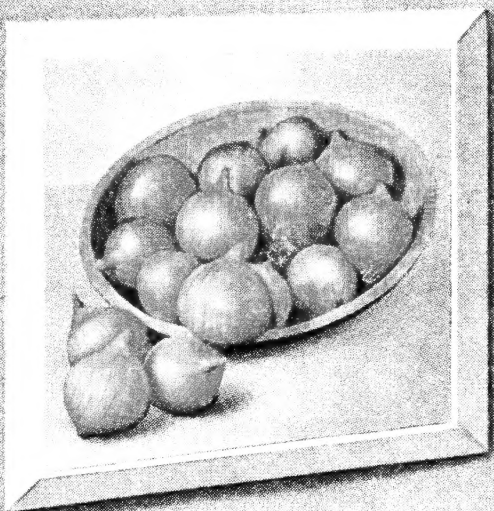
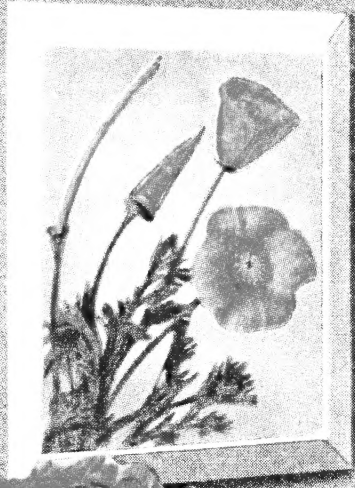
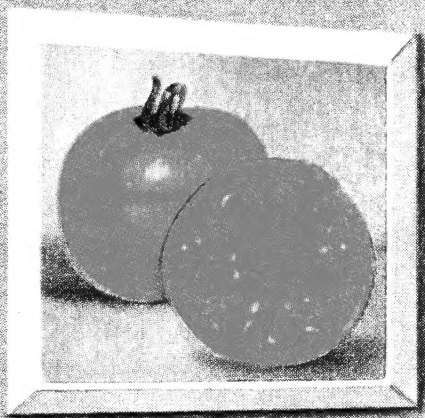
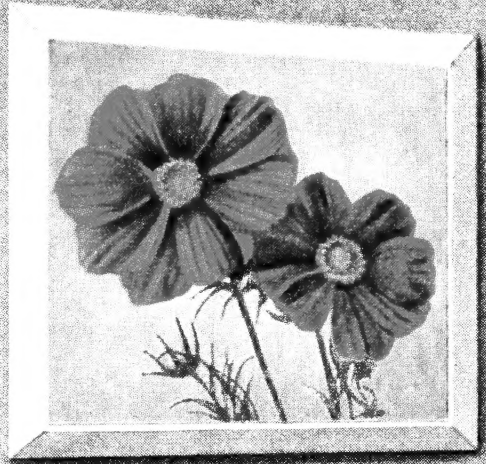
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U S Department of Agriculture

# KELLER'S

# Garden Annual-1945

GEO. KELLER & SONS, QUINCY, ILL.  
909 Maine Street

...with a  
**COMPLETE  
GARDENING  
GUIDE**



SEE INSIDE  
FRONT COVER  
for descriptions  
of items illus-  
trated here



# A very different kind of seed catalog!

As you'll soon see, this Garden Guide is far more than the usual seed catalog. It lists the necessary seeds and supplies, but it goes a lot farther than that . . . by giving you many pages of good, practical garden information . . . just the kind of facts every home gardener seeks. Then, too, this book doesn't come to you simply because you are a "name" on the list of some far-distant seed house. It is sent by a seedsman in your own home territory . . . to ask—

"What can we do to help you, neighbor?"

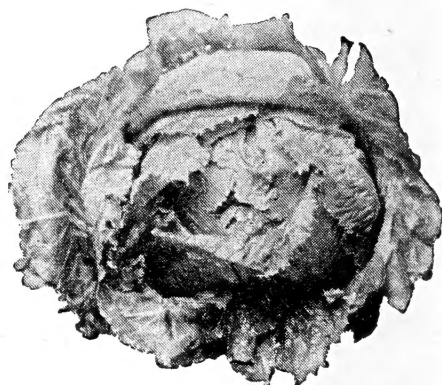
You see, we've been right here in this section for a long time. We know the soil . . . the climate. Our experience qualifies us to help you as no far-away seed house can.

Besides, we're here the year round, ready to serve you and work with you . . . as all good neighbors do.



**BEAN, Tendergreen**

A distinctly superior stringless, green-podded bush bean. Pods are rich dark green, meaty, smooth, very tender and finely flavored. Strong, vigorous, early.



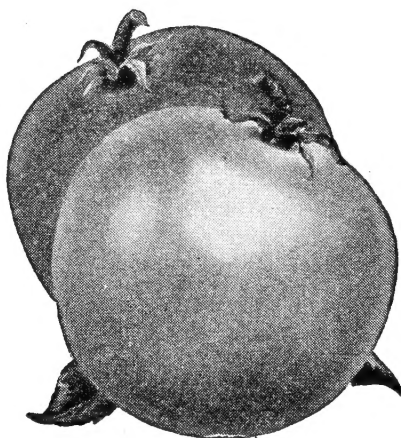
**LETTUCE, Iceberg**

Very desirable for home gardens. Sure heading. Makes compact heads, with white interior. Crisp and sweet. Resistant to heat. Late variety.



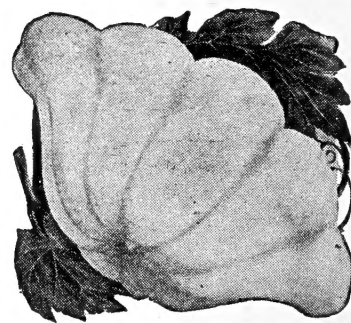
**BROCCOLI, Green Sprouting**

This fine vegetable is extremely rich in vitamins, and should be in every garden. Tender heads, delicious flavor.



**TOMATO, Marglobe**

A second-early, red-fruited tomato. Medium size fruits, smooth, solid and deep, relatively free from cracks. Resistant to wilt and rust.



**SQUASH, Early White Bush**

Fruits greenish when young, become white at maturity. 3-in. long, 7½ to 8½-in. wide. 53 days. A real treat for your table.

## FRONT COVER FLOWERS and VEGETABLES

**COSMOS, Sensation Dazzler**—An early flowering strain that grows about 4 ft. high. Has giant blooms, 4 to 6 inches across, in a lovely velvety crimson shade. Wavy, fluted petals. Larger flowers may be obtained by disbudding.

**ONION, Prizetaker**—This mild, light straw colored onion of the Spanish type becomes very large under good growing conditions, sometimes weighing up to 4 lbs. Very solid, crisp and juicy with a thin skin.

**ZINNIA, Giants of California, Mixed**—Beautiful, large double flowers, 5 to 6 in. across. They are smooth topped with the petals lying flat upon each other. Vigorous, well-branched plants with many long, strong flower stems. Ideal for cutting.

**POPPY, California**—Easily cultured, dainty flowers well adapted for beds and edgings. Blooms early and continues until frost. The modern strains come in many delicate tints and have lovely petals of satiny texture.

**TOMATO, Jubilee**—A bright, orange colored fruit, with few seeds and very high in Vitamins A and C. Fine for slicing because of uniformity and solidity. Won bronze medal, 1943.

**ASTER, Giant Crego Navy Blue**—Deep, purplish blue flowers with long, fully double, curled petals on 20-in. branching plants. The blooms are very large and attractive. A popular new strain.

**CORN, Golden Bantam**—Undeniably the favorite for table use because of its tenderness and sweetness. The cob is small but unsurpassed for quality. Matures in about 80 days.



# GEO. KELLER & SONS

**909 Maine Street, QUINCY, ILLINOIS**

Date \_\_\_\_\_, 194\_\_\_\_\_

Enclosed, find \$\_\_\_\_\_for which ship merchandise named below

By express ☐ By freight ☐ By mail ☐ Best way ☐  
(Check which you prefer)

**YOUR NAME** \_\_\_\_\_  
(All members of one family please order under one name)

Address \_\_\_\_\_ R.F.D. \_\_\_\_\_

Post Office \_\_\_\_\_ State \_\_\_\_\_

*When you order*  
**BY MAIL**

**All packet seeds, both vegetable and flowers, are shipped POST-PAID. On all other items, don't forget to add Parcel Post. See rates below:**

## PARCEL POST RATES

**On Seeds, Plants, Bulbs, Roots,  
etc., within the U. S. and Posses-  
sions. Effective Nov. 1, 1944.**

ZONE	Distance	First pound or fraction	Each additional lb. or fraction
1 & 2	150 miles	9c	1c
3	150 to 300	10	2
4	300 to 600	11	3½
5	600 to 1000	12	5½
6	1000 to 1400	13	7
7	1400 to 1800	15	9
8	over 1800	16	11

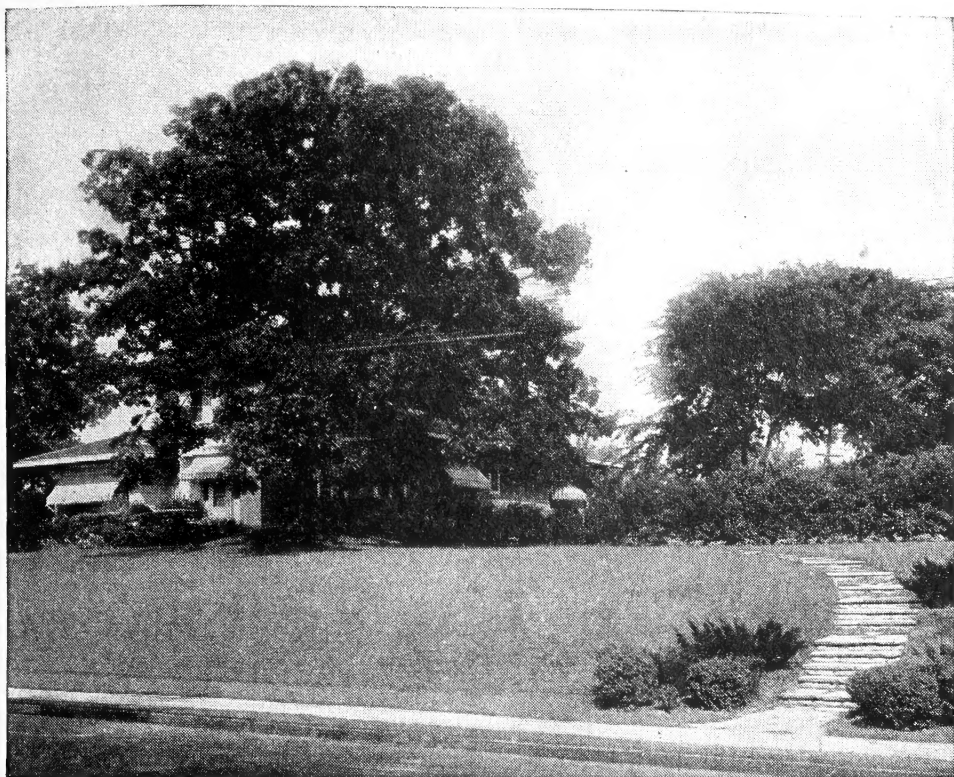
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All gardeners of experience know that success with bulbs, etc., depends largely on weather conditions and proper cultivation, so in accordance with the universal custom of the seed trade we give no warranty, express or implied, as to the productiveness

of any seeds, bulbs or plants we sell and will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price of the seed, bulbs or plants.



# LAWN GRASS SEEDS



*A better lawn  
for your home?*

## WE CAN HELP YOU!

For years it has been our business to provide exactly the *right* kind of seed for each particular lawn condition.

We know lawns—and we know this territory! So bring any lawn troubles you may have to us. Our long experience has taught us answers to the particular problems of this locality—and we're glad to pass them on to you.

Remember, too—you can depend on us for the greatest *bargain* in lawn seed—the *most grass* of the *best type* for each dollar you spend!

## HOW MUCH SEED?

Many lawn failures are due to the common mistake of using *too little seed*!

It takes plenty of seed to get the thick, lasting turf you want—and to crowd out weeds.

On new lawns, you need 5 pounds of seed per 1,000 square feet. Don't risk your lawn success by stinting on seed! The cost is so small it isn't worth it.

No lawn mixture can meet the needs of every territory—or all the varying requirements in the same vicinity.

To be sure of having a thick, lasting turf, you must sow a mixture of true turf grasses properly suited to your own soil and climatic conditions. To get such a mixture, buy your seed from a seedsmen right here in your own territory.

## Best Lawn Mixture

Our selected lawn mixture is the very finest combination of high quality seeds . . . a marvelous mixture that years of experimenting has proved to be safe and sound. It produces a lawn that is like a carpet of green velvet . . . smooth, even, and thick.

## LAWN FEEDING

*In the case of new seeding*, a liberal supply of the right turf food encourages a quick and sturdy growth of the new grass. This food should be raked into the upper two or three inches of soil.

*In renovating old lawns*, the grass should be treated with a special turf food before the seed is sown. The food should be applied when the ground is perfectly dry. The best job can be done with a special fertilizer spreader, and the fertilizer washed in with a hose.

## HORMONE TREATMENT

The value of hormone treatment for grasses has been the subject of much discussion, but tests con-

**Kentucky Blue Grass** — Produces a deep dark green lawn of close, thick turf. Maintains its green color until late in fall. Roots are deep, plants very hardy.

**White Clover**—Very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground.

**Rye Grass**—A rapid grower, valuable in mixtures demanding quick effect. Not long lasting. Good in moist soils.

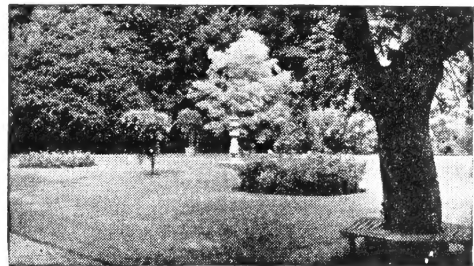
**Chewings Fescue** — Widely used for putting greens and fairways. Produces thick, durable turf, even under unfavorable conditions.

**Red Top** — Particularly suitable for wet, low spots, as it stands wet weather, or even overflowing, better than other grasses. Also does well on almost any good, rich soil. Often thrives where blue grass fails. However, it should not be considered as competitive with blue grass, but as a good supplement for it.

**Bent**—Makes a thick, dense turf on heavy, sour soils and being of a semi-creeping habit will recover the ground after injury. Unexcelled for fine lawns and putting greens.

## Shade Mixture

**SHADE MIXTURE**—Wherever shade makes it difficult to obtain a good lawn, our special shade mixture is heartily recommended. Excellent quality, shade-enduring grasses and clovers . . . blended into a mixture that will give surprising results.



ducted on a wide scale indicate that it provides valuable stimulation, particularly to root growth.

The tests show that, while top growth of plants is markedly increased by the addition of hormone powder to the seed, the increases are even greater in root growth. For example, in recent tests, treated Kentucky Blue grass showed increases up to almost 73% in top growths, and up to 244% in root growths when 1½ pounds of hormone powder were added to 160 pounds of grass seed.

The same tests, however, also showed that when the powder was added in weaker or stronger doses, growth increases were less marked, indicating the experts' directions should be followed very carefully.



## Lawn Care

### NEW LAWNS

**SOIL:** Lawns can be made on practically any soil. Heavy clays or light sands should be modified by adding plenty of old manure or compost. Dig six inches deep only—grass roots do not go deeper and loose soil is harder to get level. Rake and level with heavy timber or ladder dragged over the surface.

**FERTILIZER:** Do not use manure unless well-rotted. Do use 30 lbs. of good mixed fertilizer to 1,000 square feet applied just before digging.

**SEED:** *Cheap seed is never cheap—you'll spend many dollars fighting weeds that could be kept out by paying a few pennies more for better seed. Don't try to grow grasses unsuited to your special conditions.*

**HOW TO SOW:** Sow on a still, windless day. Divide area to be sown into plots of 1,000 square feet and sow 1½ lbs. lengthwise and 1½ lbs. crosswise on this area. Rake lightly, roll with empty roller and sprinkle gently.

**SLOPES AND TERRACES:** Seed as mentioned above but cover as soon as rolled with burlap or special erosion netting, then sprinkle. This prevents seed from washing away. Burlap will rot and need not be removed.

**UNDER TREES:** Seed these spots as early as possible, before trees leaf out. Use plenty of fertilizer as tree roots will rob grass of food. Water generously. Use shady lawn seed. Where shade is too dense, as under maples, use a ground cover like Pachysandra, Myrtle or English ivy instead of grass.

**MOWING NEW LAWNS:** Roll lightly the day before cutting. Set mower at 2 inches: never cut new lawn closely. Never let new lawn get taller than 2½ to 3 inches even if some spots are very short. Let clippings lay unless weather is extremely wet.

### OLD LAWNS

**PREPARATION:** Top dress with 1 inch of compost, old manure, leaf mould or with ½ inch of peat moss. Work into surface with rake. Sow 1½ lbs. grass seed to every 1,000 square feet, rake in lightly and roll. Then sprinkle gently but thoroughly.

**POLLING:** Most lawns are packed entirely too hard with the roller. The purpose of rolling is to press back clumps of grass that have heaved during freezing weather. Lawn should never be rolled when wet or soggy. Allow it to dry off first and then use a light roller. Heavy water rollers should be empty or not more than one-quarter full. Usually one rolling in spring is enough.

### WATERING

Because grass roots are shallow, watering is difficult without wasting water. Unless watering can be continued all through dry spells, it is better to allow lawn to go dormant until rains begin again. Proper amounts of humus in soil do much to reduce the length of summer dormancy in lawn grasses.

# FARM SEEDS? We can supply whatever you need!

### ALFALFA

A marvelous soil builder and soil restorer. We carry a full range of varieties, all well suited to this territory.

### CLOVERS

**Alsike**—Very hardy. Does better on moist land than other varieties of Clover. Suitable for hay or pasture.

**Medium Red**—The most valuable of the Clover family. Makes two crops the second year. Does not exhaust the soil, but enriches it.

**Sweet, White Blossom**—Most abundant growth of any of the Clovers. Makes a pasture earlier than other crops and will keep stock in good condition until winter regardless of heat and drought. Use to build up worn out fields.

### SEED CORN

More and more, the problem of choosing seed corn is becoming a local problem. It's of prime importance to have the varieties that best fit your own growing conditions.

Our selection is built on intimate knowledge of this district.

### GRASSES

**Brome Grass**—Drought defying, resistant to frost and extreme heat alike. Starts 2 to 3 weeks earlier than native prairie grasses, and stays green later in fall. Produces abundant pasturage and enormous crops of high grade hay.

**Chewings Fescue**—Widely used for putting greens, fairways and tees. Very hardy, produces thick, durable turf, even under unfavorable conditions.

**Kentucky Blue Grass**—Produces a deep dark green lawn of close, thick turf. Maintains its green color until late in fall. Roots deep, plants hardy.

**Orchard Grass**—Hardy, quick-growing. Gives a large yield of excellent hay. May be cut several times during season. Not recommended for lawn use.

**Rape**—One of the very finest pastures for economical production of pork, mutton, or beef. A good crop gives you 12 to 15 tons of green food per acre.

**Red Top**—Particularly suitable for wet, low spots, as it stands wet weather better than other grasses. Also does well on almost any good, rich soil. Often thrives where blue grass fails.

**Rye Grass, Domestic**—Fast-growing one-year grass. Yields abundantly, and matures all in one season. Helpful as a nurse crop to other grasses.

**Rye Grass, Perennial**—An excellent nurse grass when quick turf is needed. Does well on moist soils but not long lasting.

**Sudan**—The ideal emergency hay and pasture crop for late planting. Never plant until the ground is thoroughly warmed.

**Millet, Hungarian**—Matures a week or so earlier than Golden Millet so can be sown later. Makes fine quality hay.

### ASK FOR OUR LATEST LIST OF VARIETIES AND PRICES

**Soy Beans**—The crop of many purposes. Excellent for hay, ensilage, grain, and soil improvement. Ground soy beans are as good or better than Oil Meal for mixing with grains in a balanced dairy ration.

We offer the highest quality seed of a good range of varieties. Consult us about the choice of varieties best suited to your own needs.

**Timothy**—Unsurpassed as a crop for hay. Relished by all kinds of stock, especially horses. Not suited for permanent pasture.

**Vetch**—A great producer, for hay, pasturage, or silage. Good cover crop and soil builder. May be sown spring or fall, is not particular as to soil, and needs only moderate moisture.

### BENT

**Astoria**—An attractive dark green fine-bladed grass for fine lawns and putting greens. Best of the bents for lawns.

**Seaside**—The true creeping type. Forms dense sod of beautiful dark green. Will stand close cutting and resists hard wear. Excellent for putting greens.

### KENTUCKY BLUE GRASS

Considered by many as our most valuable native grass. It forms a close, thick turf of rich dark green. Being slow to germinate, use in combination with other grasses, especially in making a new lawn. Our stock is thoroughly re-cleaned to eliminate chaff, weed seeds and other foreign matter.

### WHITE CLOVER

Very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground. Very hardy.

**Chewings Fescue**—A vigorous growing fine-bladed grass especially valuable for terraces and shady places. Very resistant to heat, drought.

### OTHER GRASSES

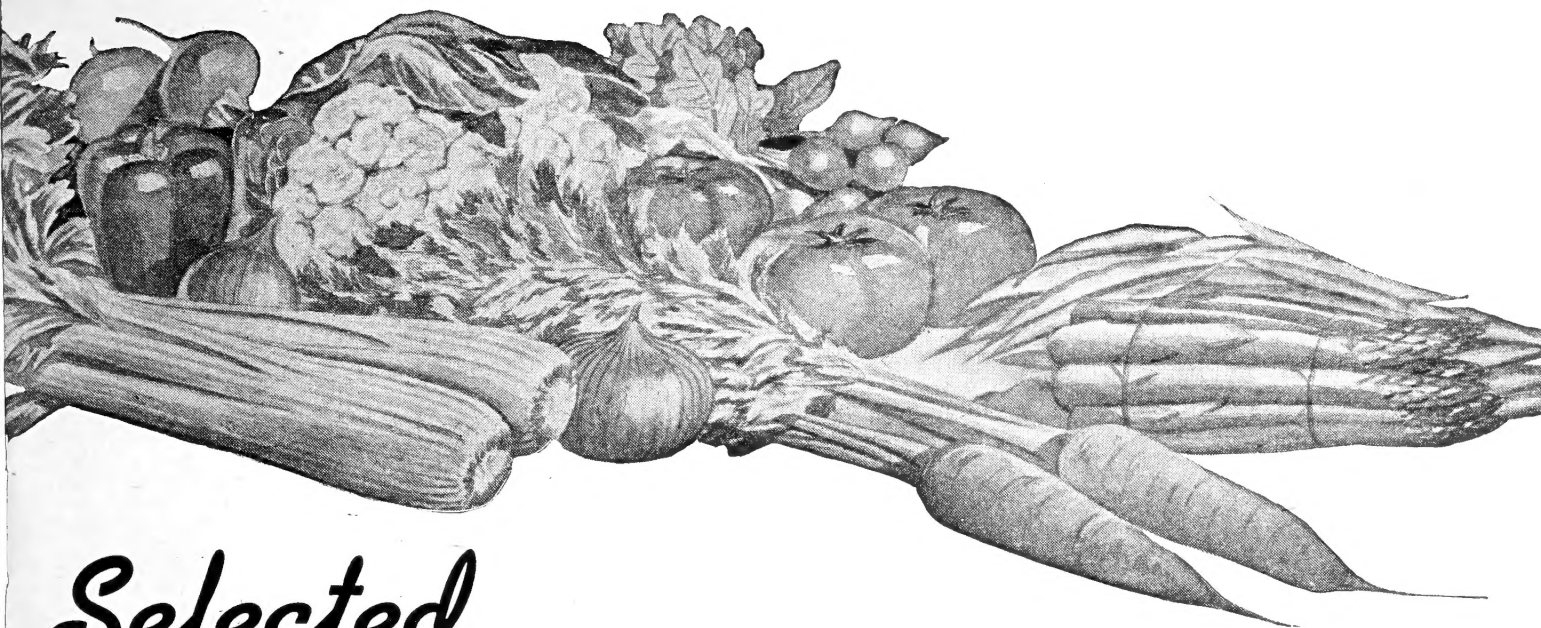
**Orchard Grass**—Hardy, quick-growing. Gives a large yield of excellent hay. May be cut several times during season. Not recommended for lawn use.

**Rye Grass, Domestic**—Fast-growing one-year grass. Makes a full crop, yields abundantly, and matures all in one season. Helpful as a nurse crop to other grasses.

**Rye Grass, Perennial**—Very good for quick covering on new lawns. Makes a good growth in a few weeks but will not make a permanent sod.

### SEED POTATOES

Our Certified Stocks are the most economical you can plant, because they reduce your hazards, give you bigger production and fewer culls. They are true to name . . . grown especially for seed stock . . . more highly disease resistant . . . tagged for origin.



# Selected

# VEGETABLE SEEDS

## ASPARAGUS

**Mary Washington**—Thick, tall green spears with purple tops. Highly rust resistant. Rapid growing. Tender.

## BEANS

### Green Podded, Dwarf or Bush

**Black Valentine Stringless**—Hardy, early maturing, very productive. Pods, dark green, 6-6½ inches long, brittle, smooth, stringless. Seeds black. 51 days.

**Bountiful**—An early, heavy-yielding variety. Flat, light-green, stringless, slightly fibrous. 49 days.

**Giant Stringless Green Pod**—Large, sturdy plants. Meaty, round pods, brittle, strictly stringless. Medium green pods. Oval, yellowish-brown seed. 54 days.

**Plentiful**—Productive, early. Flat, medium green pods, 6 to 7-in. long, strictly stringless. Choicest quality. All-America Bronze Medal 1939. 51 days.

**Stringless Green Pod**—Early, sturdy. Very meaty, round, fully stringless and fibreless. 50 days.

**Tendergreen**—Large, erect plants. Abundant, round, dark-green pods, strictly stringless and fleshy. 54 days.

### Wax Podded, Dwarf or Bush Varieties

**Golden Wax**—A home garden favorite. Small, erect plants, moderately productive. Straight, thick, flat pods, yellow, stringless. 51 days.

**Pencil Pod Black Wax**—Early and productive. Rich yellow, deep curved round pods. 5½ to 6-in. long. Always stringless, tender, brittle and fleshy. 52 days.

**Round Pod Kidney Wax (Brittle Wax)**—Large, erect, vigorous plants. Medium yellow curved pods, crease-backed, entirely stringless, very brittle, fleshy and succulent. 58 days.

**Sure Crop Stringless**—Handsome, rich yellow pods. Sturdy, brittle. 6-6½ in. long. Strictly stringless. 53 days.

## Pole Beans

**Kentucky Wonder (Old Homestead)**—Strong climber, hardy, long-bearing. Curved, almost round pods. Slightly stringy but meaty. 65 days.

**Kentucky Wonder Wax**—Very popular. Vigorous, good climbing plants, waxy-yellow pods, flat and nearly stringless. Somewhat fibrous but meaty. 68 days.

**Yard Long**—Cowpea group. Oval, fleshy fibreless and tender with red-brown seed. Pods 8-10 in. long. 70 days.

## Lima Beans, Dwarf or Bush

**Baby Potato**—1940 All-America. Small, thick-seeded butter bean with real flavor, early maturity and prolific growth. 12 to 16-in. tall. 72 days. 15c.

**Burpee's Improved Bush**—Best of flat seeded bush limas. Pods contain four or five large beans of excellent quality. 75 days.

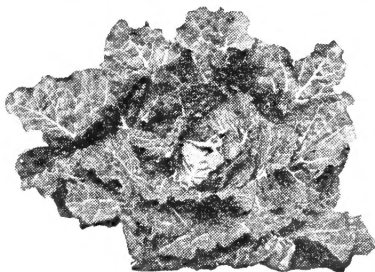
**Fordhook Bush**—Straight pods with plump, large beans, excellent quality. 75 days.

**Henderson's Bush**—Known as Baby Lima or Butter Bean. Plants small, early and bushy. 65 days. Very productive.

## Lima Beans, Pole

**King of the Garden**—Flat, smooth pods with four or five white, large, flat beans. 88 days.

## ESPECIALLY RECOMMENDED



## COLLARD Georgia or Southern

Favorite of winter "greens." Grows to 2 ft., forming large, loose heads of succulent leaves on long stem. 24 to 36 days.

## About our selection of vegetable seeds

You'll find a hand-picked list of vegetable seed varieties offered on these pages. They are the kinds we know from experience are the most suited to home gardening.

Of course, you'll find many longer lists than we've given you here. But out of the many thousands of varieties available, we've simply chosen the best of the lot for quality, yield, and your own gardening needs.

If there should be some varieties you want, and can't find listed in this book . . . ask us about them.

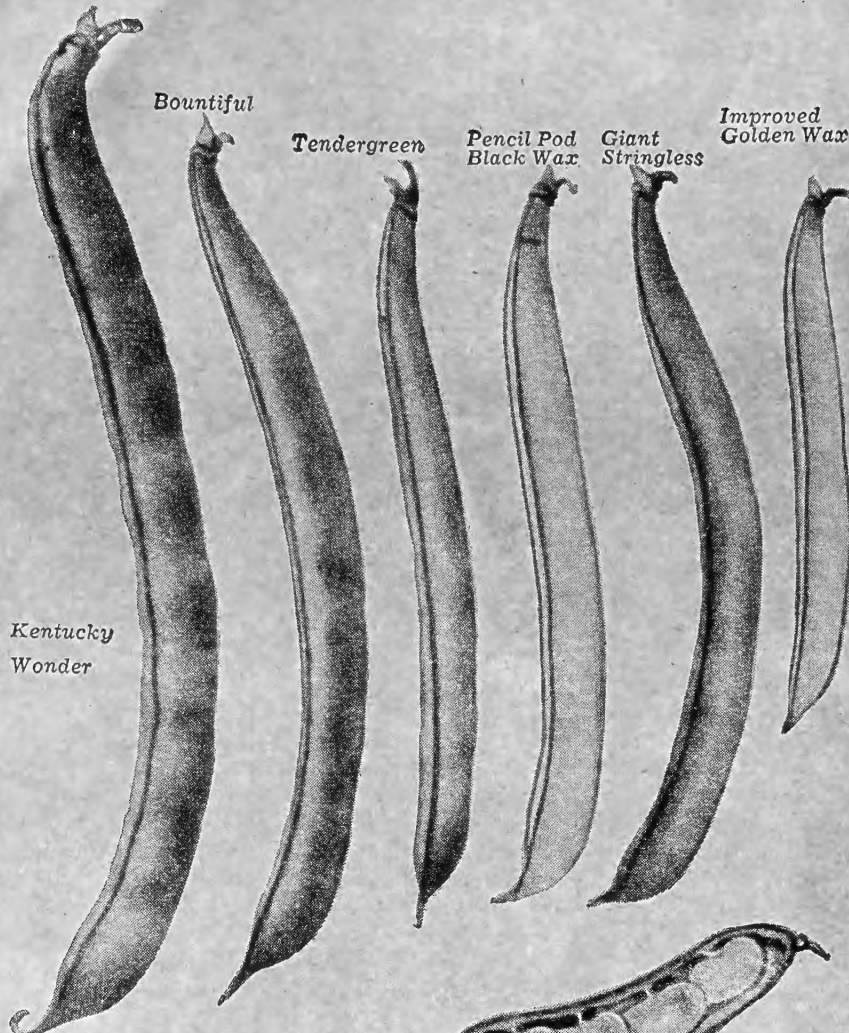
We can either supply what you want . . . or get it for you.

## All Vegetable Seeds

**10c PER PACKET  
UNLESS OTHERWISE NOTED**

In bulk quantities at money-saving prices. Special quotations to market gardeners. Prices subject to change without notice.





Kentucky Wonder

Bountiful

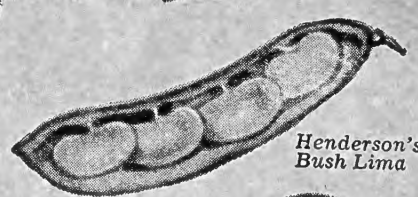
Tendergreen

Pencil Pod Black Wax

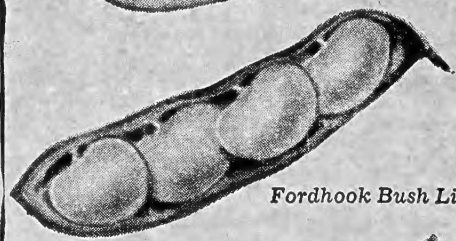
Giant Stringless

Improved Golden Wax

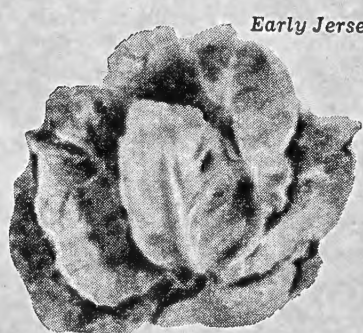
**TRUE-TO-SCALE  
ILLUSTRATIONS**  
showing correct  
comparison of  
size and form



Henderson's Bush Lima



Fordhook Bush Lima



Early Jersey Wakefield



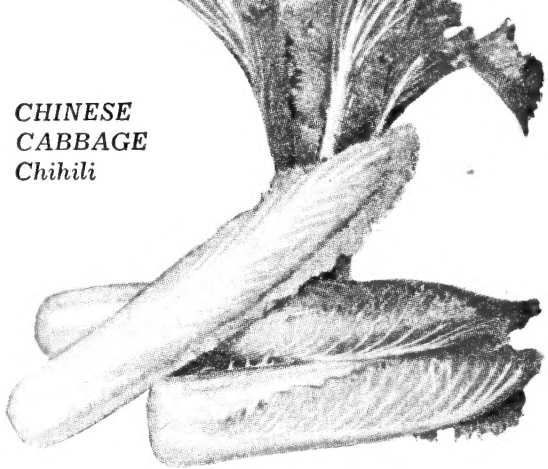
Chinese Cabbage,  
Chihili



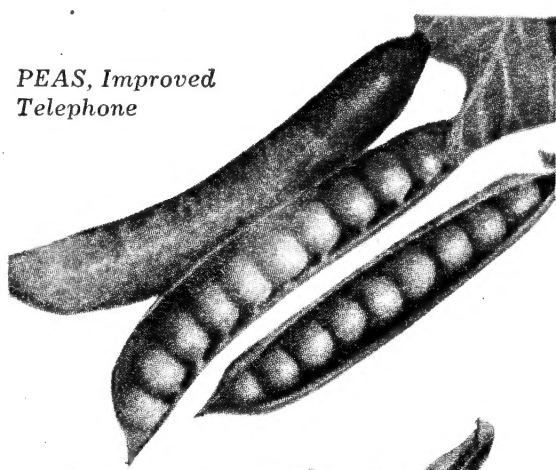
Copenhagen Market



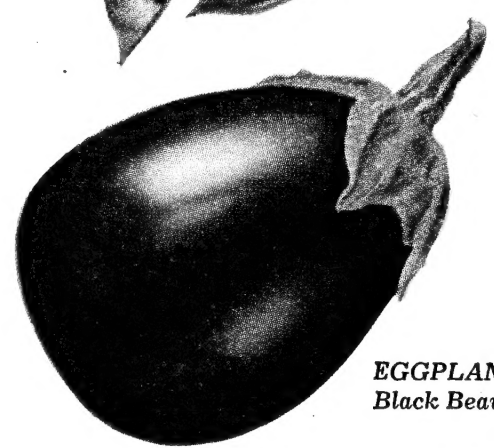
Golden Acre



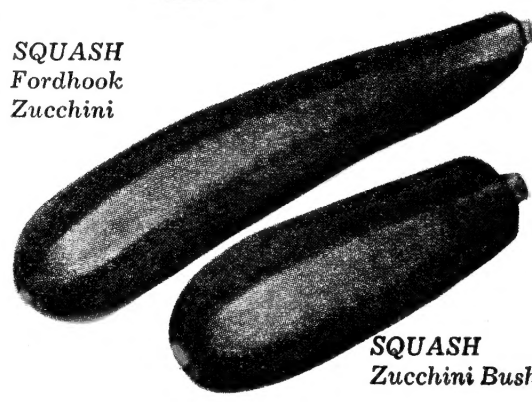
CHINESE  
CABBAGE  
Chihili



PEAS, Improved  
Telephone



EGGPLANT  
Black Beauty



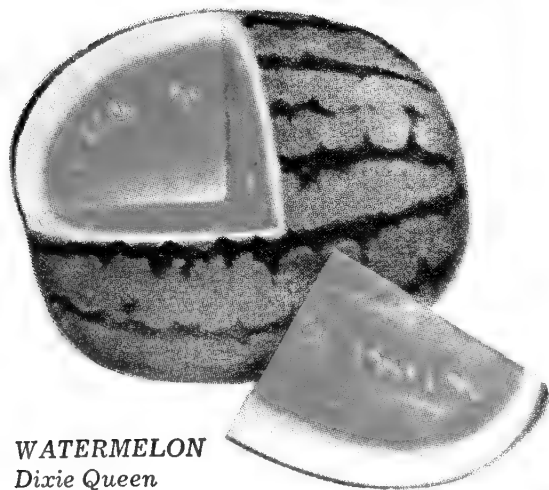
SQUASH  
Fordhook  
Zucchini

SQUASH  
Zucchini Bush

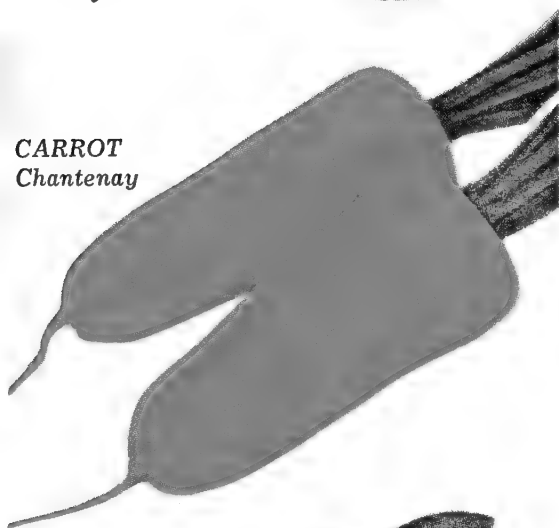


CANTALOUPE, Hearts of Gold

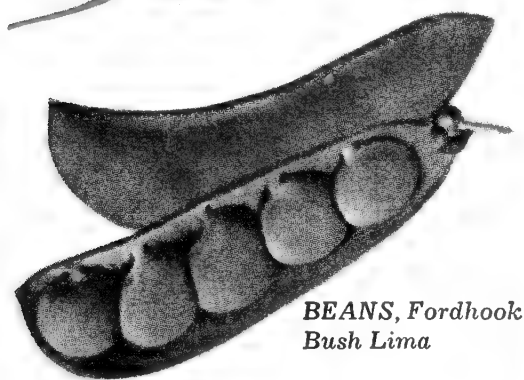




**WATERMELON**  
*Dixie Queen*



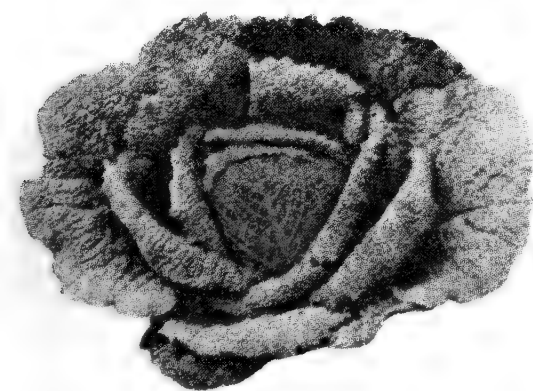
**CARROT**  
*Chantenay*



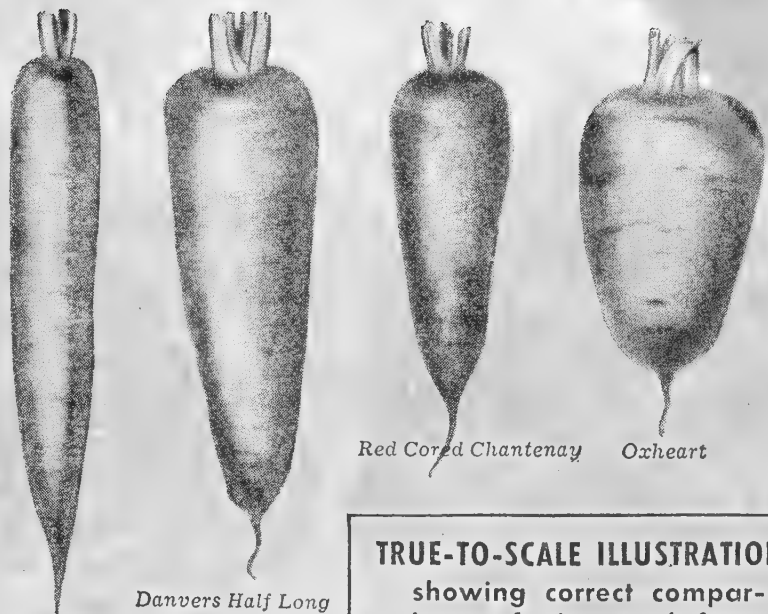
**BEANS, Fordhook**  
*Bush Lima*



**BEETS, Crosby's**  
*Improved Egyptian*



**CABBAGE, Perfection Savoy**



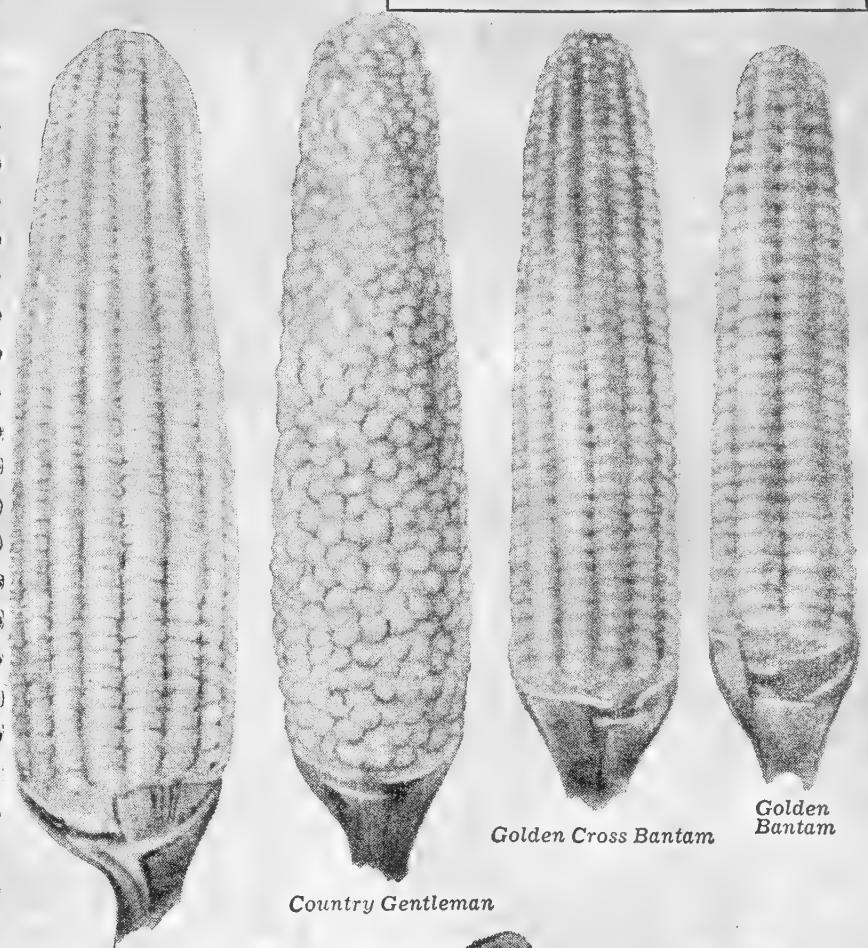
*Imperator*

*Danvers Half Long*

*Red Cored Chantenay*

*Oxheart*

**TRUE-TO-SCALE ILLUSTRATIONS**  
showing correct compar-  
ison of size and form

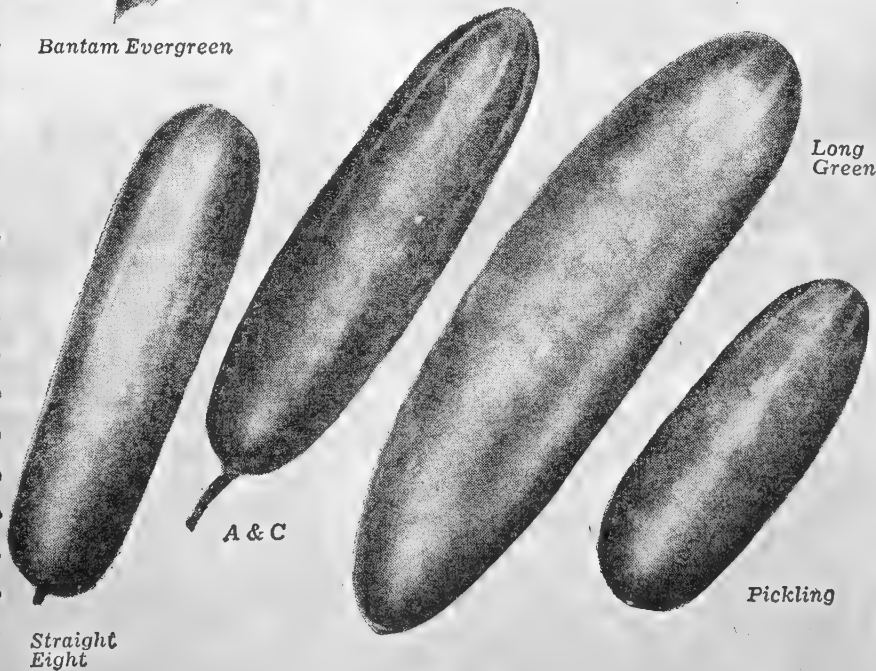


*Bantam Evergreen*

*Country Gentleman*

*Golden Cross Bantam*

*Golden Bantam*



*Straight Eight*

*A & C*

*Long Green*

*Pickling*

# Give your garden a head start! with big, healthy VEGETABLE PLANTS

This year, treat your family to earlier vegetables by starting your garden with our Specially Selected Plants. These are big, healthy, strong plants that will grow and thrive, and produce abundantly the vitamin-rich, healthful vegetables everyone craves and needs.

We can supply you with most every type of thriving vegetable plant, ready to set out. They are all husky specimens . . . hardy and full of growth. This year, have earlier and more vegetables by setting out PLANTS.

**Small Sieva**—Plant 10 to 12-ft. tall, and bears over a long season. Medium green pods with three to four beans of excellent quality. 77 days.

## BEANS, SHELL

**Navy**—Small seed, almost round and white. Hardy, prolific. Most popular for baking. 95 days.

**Red Kidney**—Pods 6-7 in. long. Flat, large beans, pinkish red to mahogany in color. Rich flavor. 95 days.

**Soy (Edible)**—Plants are extremely productive, vigorous and upright. Beans may be used green or dry. 95 to 110 days.

**White Marrowfat**—Pods grow 4½-5 in. Well filled with 5 or 6 large white beans. Valued for baking. 100 days.

## BEETS

**Crosby's Egyptian**—Extra early. Flattened globe shaped roots with small dark red top root. Excellent quality, tender, sweet. 60 days.

**Detroit Dark Red**—Standard of excellence in table beets. Smooth, globular roots of deep ox-blood red—sweet, tender. 68 days.

**Early Wonder**—Early variety that can also be used for fall planting. Semi-globular, tender, blood-red flesh. 58 days.

## BROCCOLI

**Italian Green Sprouting**—Plant bears a succession of sprouting heads about 5 in. long, which, if kept cut, will be replaced by others for 8 to 10 weeks. 55 to 65 days. Pkt. 10c.

## BRUSSELS SPROUTS

**Long Island Improved**—Compact, uniform dwarf size plants. Cabbage-like sprouts 1¼-1½ in. in diameter. One of the most dependable varieties. 90 days.

## CABBAGE

### Yellow Resistant Varieties

**Golden Acre**—Extra early Copenhagen type. Dwarf plants, small round solid, 6-in., 3-lb. heads. 63 to 65 days.

**Marion Market**—Large, firm, round heads, used for early kraut. A development from Copenhagen Market. 7-in., 4-lb. heads. 75 to 80 days.

**Wisconsin All Seasons**—Mid-season all-purpose variety, slightly coarser than standard All Seasons. 10 to 12-in., 9 to 10-lb. heads. 90 to 95 days.

**Wisconsin Hollander**—Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ball Head. 7 to 8-in., 7 to 9-lb. heads. 100 to 110 days.

### Standard Early Varieties

**Copenhagen Market**—Excellent, early short season type. Short stems, 6½-in., 3½ to 4-lb. heads. 65 to 70 days.

**Early Jersey Wakefield**—Pointed heads, small and firm. Earliest pointed variety. Plants compact. 62 days.

**Golden Acre**—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality. 65 days.

### Late or Winter Varieties

**Danish Ball Head or Hollander**—A widely used late type. Deep, round, hard, compact heads, 7 to 8-in., 6 to 7-lb. Tender, crisp, fine for kraut. 100 to 105 days.

**Perfection Drumhead Savoy**—Heads round, hard, compact. Leaves deep green, coarsely crimped, dark green. Keeps well. 90 days.

### Red Varieties

**Mammoth Red Rock**—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 6 to 8-in., 7 to 8-lb. heads. 100 days.

## CHINESE CABBAGE

**Chihili or Improved Pekin**—Dependable, early. Solid, tapered heads, 3 to 4-in. thick, 18 to 20-in. long. 75 days. Pkt. 10c.

## CARROTS

**Chantenay, Red Cored**—Root has thick shoulder and tapers to slight stump root, 5-in. long. Red cored. 70 days.

**Danvers Half Long**—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing. 75 days.

**Imperator**—Fine-grained, tender. Rich orange, indistinct core. Smooth, tapered to semi-blunt. 77 days.

**Nantes Improved Coreless**—Excellent for forcing. Tops small, roots bright

orange, blunt ended. Flesh reddish orange and practically coreless. 70 days.

**Oxheart or Guerande**—Excellent for shallow soil, easy to harvest. Chunky, tender and sweet. Bright orange. Keeps well. 72 to 75 days.

## CAULIFLOWER

**Early Snowball**—Best and most widely used early variety. Medium, firm compact heads of fine flavor. 6-7 inches in diameter. 55 days. 25c pkt.

## CELERIAC

**Giant Smooth Prague**—(Turnip root-ed celery). Smooth spherical roots. 2 to 3-in. thick. 120 days. Pkt. 10c.

## CELERY

**Giant Pascal**—Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white. 135 days.

**Golden Self Blanching, Dwarf**—Compact plants, yellowish green foliage. Broad solid stalks, nutty flavor. Blanches readily. 120 days.

**Wonderful or Golden Plume**—Early, medium plant with compact, full heart. Blanches easily to golden yellow. 112 to 115 days.

## CHICORY

**Witloof (French Endive)**—Compact, blanched head. Crisp, broad leaves having pleasant sharp flavor. Must be reset in cold frame or greenhouse in north. 140 to 160 days.

**Large Rooted (Magdeburg)**—Dried roots are roasted and mixed with ground coffee. Roots 12 to 14 in. long, tapered from 2 in. at top. 120 days.

## COLLARD

**Southern or Georgia**—An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

## SWEET CORN

### Hybrids

*We offer Hybrid Sweet Corn varieties known and grown the country over—the finest that can be procured anywhere. We list here only a few of these choice kinds. Whatever your needs or your preference, be sure we can supply you with the kind of corn you want. Talk it over with us. Let us help you to increased yields and increased enjoyment.*

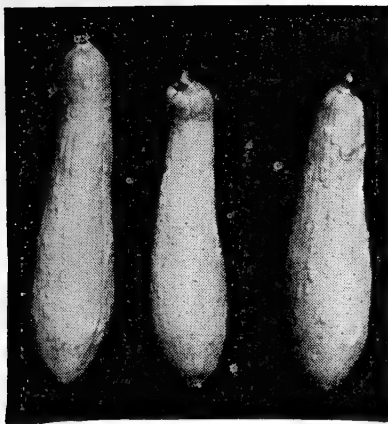
**Golden Cross Bantam**—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

**Ioana**—1940 All-America. Ears 7½ to 8-in., well filled with 12 or 14 rows of deep, medium narrow, light yellow kernels. Highly resistant to drought and bacterial wilt. 87 days.

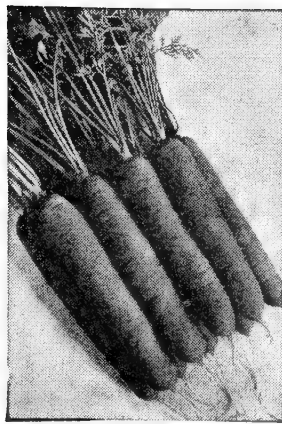
*All Vegetable Seeds*

**10c PER PACKET  
UNLESS OTHERWISE NOTED**

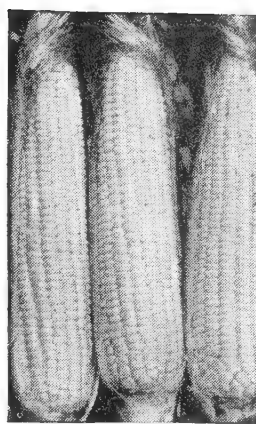
*In bulk quantities at money-saving prices.  
Special quotations to market gardeners.  
Prices subject to change without notice.*



**SQUASH, Early**  
*Prolific Straightneck*



**CARROT**  
*Nantes*



**CORN**  
*Ioana*

**Marcross**—An early wilt-resistant yellow hybrid, producing deep golden yellow kernels 7 days earlier than Golden Bantam. Ears 6 to 7-in. long, with 12-14 rows of large sweet kernels. 73 days.

**Stowell's Evergreen** — White. Large ears about 8-in. long; big kernels, very sweet. One of the best late varieties. 95 days.

### Open-Pollinated

**Bantam Evergreen**—A cross of Golden Bantam on Stowell's Evergreen. 14 to 18 rows. Deep, rich golden kernels, tender, sweet. 90 days.

**Black Mexican**—Pure white corn with purplish-black seed. Ears are 7 to 8 in. long, 8 rows. Cylindrical straight rowed. 88 days.

**Country Gentleman or Shoe Peg**—Prolific late variety. Favored by canners. Irregular kernels, very deep, slender, sweet. 93 days.

**Golden Bantam**—The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull, sweet and of very fine flavor. 80 days.

### POP CORN

**South American**—Large eared yellow sort, enormous when popped. 100 days.

### CRESS

**Curled or Pepper Grass**—Grows very quickly. Use for flavoring salads, for garnishing, or as a green in sandwiches. Has an agreeably pungent taste. Best if used when young. 40 days. Pkt. 10c.

### CUCUMBER

**A and C**—A long dark green cucumber which merits a trial. Uniform, nearly cylindrical, well rounded at ends.

**Davis Perfect**—Midseason. 9 to 10 in. long, tapered both ends, good color. 68 days.

**Early Fortune**—Rich, dark green fruits with firm, crisp, pure white flesh. Grows to 9 by 2½-in. Ships well, and is highly resistant to disease. 66 days.

**Early White Spine (Extra Early)**—Deep green, practically free from ridges. 7 in. long. Vines produce freely. 55 days.

**Long Green Improved**—Black spined, good pickling. Grows 10 to 15 in. long. 70 days.

**National Pickling**—Rich dark green. Straight and rather blunt at ends but not chunky. Best all-around pickler. 55 days.

**Straight Eight, w.s.**—Unsurpassed as slicing cucumber. All-America Selec-

tion. 2½-lb. fruits, rounded at ends, medium green. 68 days.

### DILL

**Long Island Mammoth**—Used for flavoring. Flat seeds have strong, bitter flavor. Pkt. 10c.

### EGGPLANT

**Black Beauty** — Large, egg-shaped, smooth, very dark purple fruits. Keep well. Plant bears 4 to 5 fruits. Early. 80 days. Pkt. 10c.

### ENDIVE

**Broad-Leaved Batavian or Escarole**—Large broad leaves forming immense round plants up to 16 in. across. Easily blanched. 90 days.

**Full Heart Batavian**—An improved and earlier Escarole. Large leaf, thick head. Leaves crisp and tender. 88 days.

**Large Green Curled or Giant Fringed Oyster**—Leaves large. Finely cut and curled. Rich green color but blanches to a creamy white. 65 days.

### KALE OR BORECOLE

**Dwarf Green Curled**—Hardy, large and very attractive bright, deep green. 100 days.

**Dwarf Siberian**—Hard and productive. Bluish green foliage. Leaves large and spreading. 65 days.

### KOHLRABI

**White Vienna Early**—8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular, light green. Crisp, tender, clear white flesh. 55 to 60 days. Pkt. 10c.

### LEEK

**Large American Flag**—An early, popular variety, with thick, long white stems. Leaves large and drooping, medium green. 130 days. Pkt. 10c.

### LETTUCE

#### Cos or Romaine

**Dark Green Cos**—Self folded loaf-shaped head. White leaves with faint tinge of green. Very crisp. 84 days.

**White Paris or Trianon** — Medium large self-folding, dark green, loaf-shaped heads. Greenish-white, well blanched interior. 66 days.

#### Head

**Big Boston or Mammoth Boston**—Popular for cold frame forcing and outside culture. Medium, compact heads with creamy yellow heart. Smooth, glossy leaves, edges wavy, and slightly tinged with reddish brown. 75 days.

**Iceberg**—Late, large variety. Compact heads, crumpled, crisp and sweet. Leaves light green, slightly brown on edges. 85 days.

**Great Lakes**—All-America award. An outstanding new Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads medium size, solid, crisp.

**New York No. 12**—The standard crisp-head lettuce. Large globular shaped head, dark green with blanched, silvery white heart. Successfully grown outdoors spring, summer and fall. 85 days.

#### Loose Leaved Varieties

**Black Seeded Simpson**—Light green, frilled and crumpled. 45 days.

**Chicken**—Produces largest amount of leaves of any lettuce. Fast-growing. For poultry and rabbit feeding. 40 days.

**Grand Rapids**—Erect, compact, plants. Light green, broad heavily fringed. For forcing or early planting outside. 43 days.

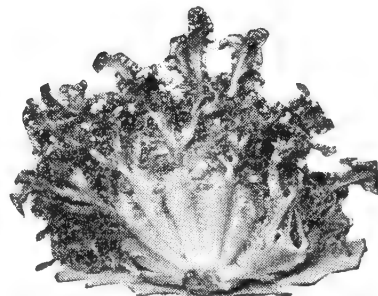
**Prize Head**—Early non-heading sort. Medium sized plants, crisp and tender. Color light brown on a medium green base. Leaves frilled at edges, and crumpled. 47 days.

**Simpson's Early Curled**—Also called Early Curled Silesia. Early hardy and dependable. Non-heading. Leaves large frilled, crumpled, light green; form a compact bunch at center. 45 days.

## Especially RECOMMENDED

### PEPPER, World Beater

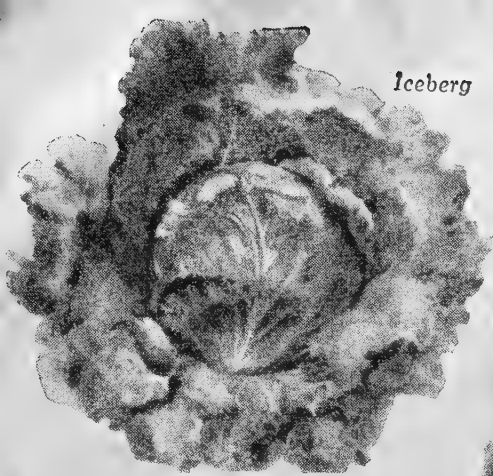
A large, handsome pepper that grows to 5 in. long, 3½ in. diameter. Three- or four-lobed, with very thick, mild and sweet flesh. Fruit is glossy green changing to dull red when ripe. Plants are vigorous and productive.



### ENDIVE, Deep Heart Fringed

Favorite of French chefs for green salads. This improved strain has full, deep, compact heart and thick, green leaves curled at the edges, blanched at the center. Can be sown early, as soon as ground can be worked, or later for main crop.





Iceberg



Black Seeded Simpson



Big Boston



Cos, or  
Romaine

**TRUE-TO-SCALE ILLUSTRATIONS**  
showing correct compar-  
ison of size and form



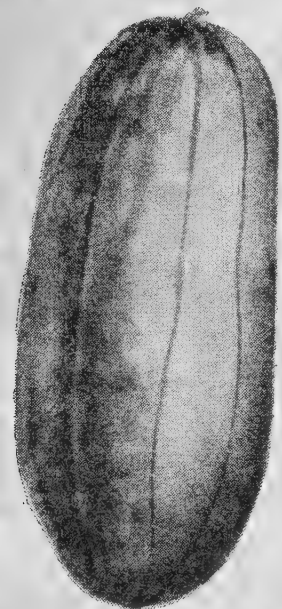
Sweet  
Spanish



Southport  
Yellow Globe



White  
Portugal



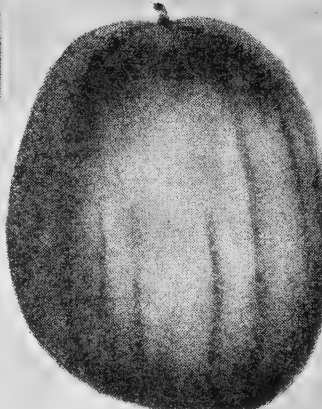
Kleckley's Sweet



Tom Watson



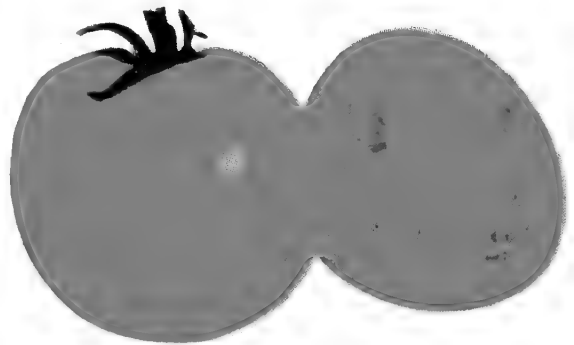
Dixie  
Queen



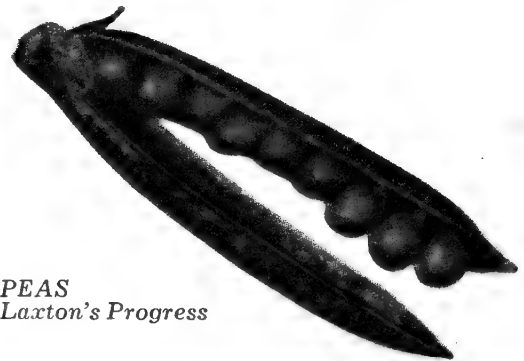
Stone Mountain



CABBAGE, Early Jersey Wakefield



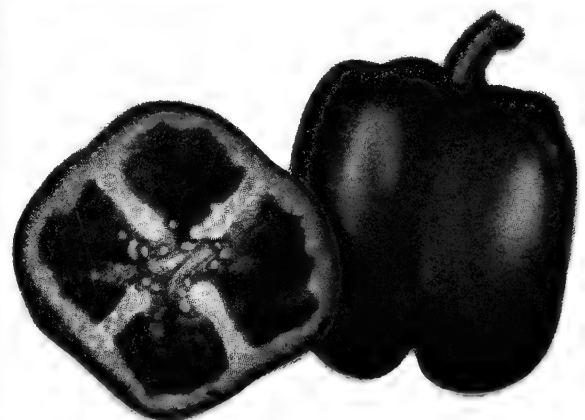
TOMATO, Rutgers



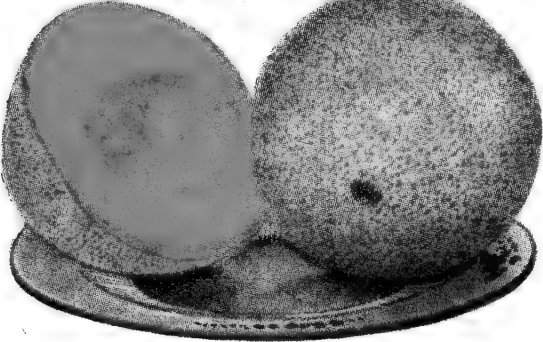
PEAS  
Laxton's Progress

**THIS YEAR**  
*it's* **FLOWERS, too!**

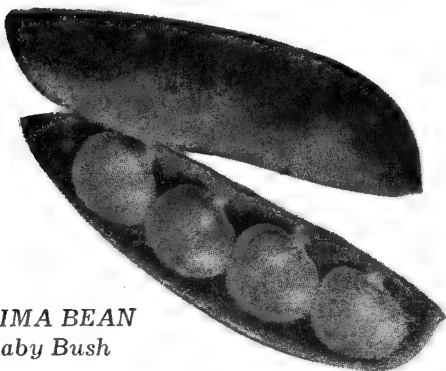
Vegetables? Of course! They  
grow dollars in return for  
pennies! They're your duty!  
But in a world longing for  
peace, grow flowers, too. The  
world needs beauty . . . now  
more than ever!



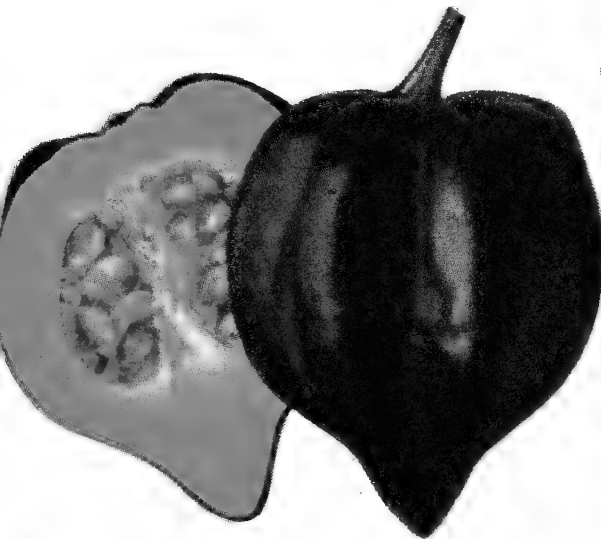
PEPPER, California Wonder



MUSKMELON, Hale's Best No. 36



LIMA BEAN  
Baby Bush



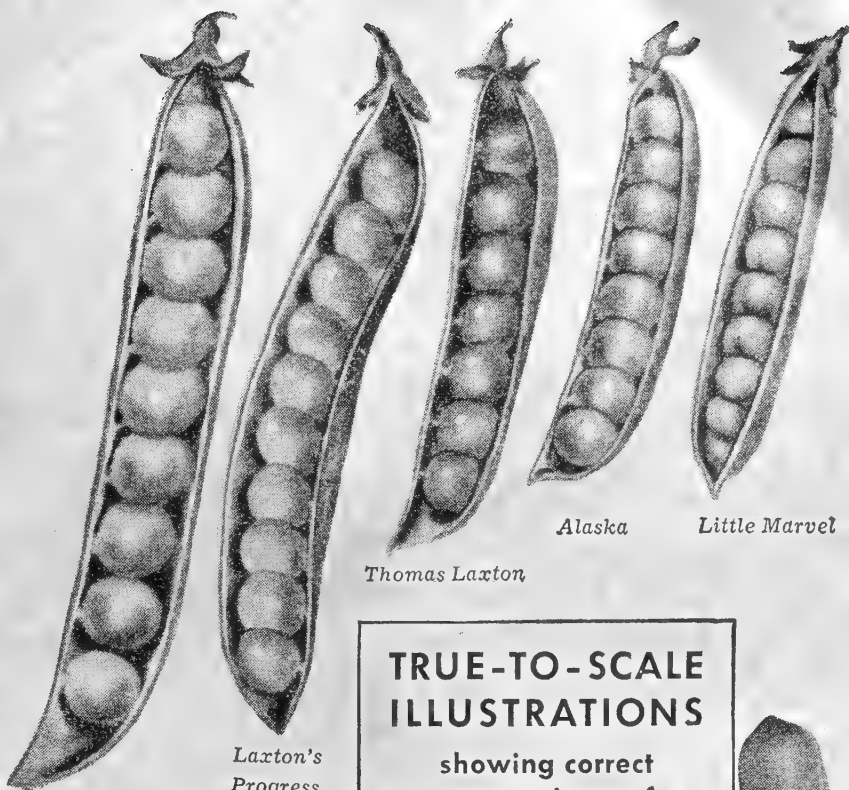
SQUASH, Table Queen or Acorn



SWEET CORN  
Golden Cross  
Bantam



BEANS, String-  
less Green Pod



Alderman

Laxton's  
Progress

Thomas Laxton

Alaska

Little Marvel

TRUE-TO-SCALE  
ILLUSTRATIONS  
showing correct  
comparison of  
size and form

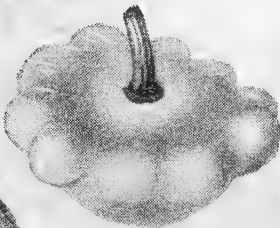


Zucchini

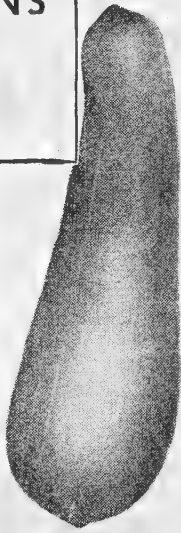


Table Queen

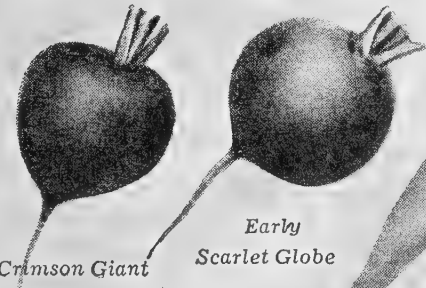
Summer Crookneck



Early White  
Bush Scallop

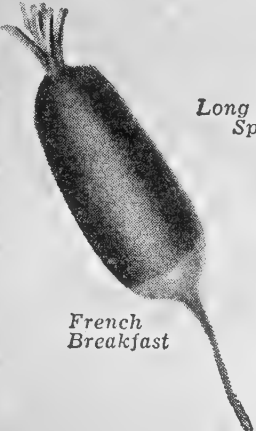


Early Prolific  
Straightneck

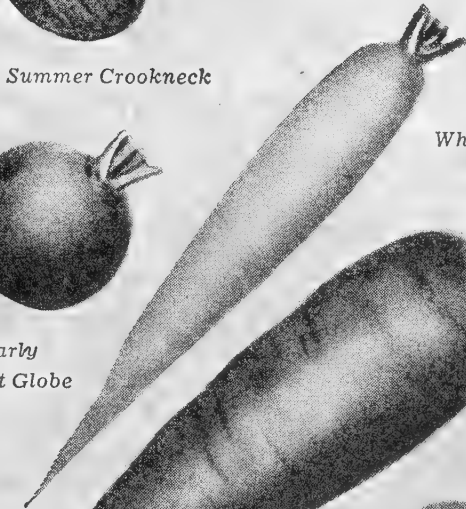


Crimson Giant

Early  
Scarlet Globe



French  
Breakfast



White Icicle

Long Black  
Spanish



China Rose Winter



## MANGEL WURZEL

**Mammoth Long Red**—Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red, flesh white with rose tinge. 110 days.

## MELONS

### Muskmelon and Cantaloupe

**Bender's Surprise** — Improved Surprise, similar to Tip Top. Coarse netted 7-lb., oblong fruit, distinctly ribbed, hard greenish-yellow skin. Flesh bright salmon. 95 days.

**Hale's Best, No. 36** — An improved strain. Early, uniform, oval, light ribbed, heavily netted. Thick, salmon flesh. Sweet, spicy. 80 days.

**Hearts of Gold or Improved Hoodoo** — Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, deep salmon flesh, tender sweet. 94 days.

**Honey Rock or Sugar Rock**—Round, 4-lb. fruit. Grey-green skin, coarse, sparse netting. Orange-salmon, thick flesh, fine flavor. 85 days.

**Pride of Wisconsin**—Small seed cavity and thick, orange flesh, excellent flavor. Matures early. Large size. A new melon which is deservedly becoming a leader. 92 days.

### Watermelon

**Dixie Queen** — Very prolific. Bright red, crisp, splendid quality fibreless flesh. Very few small, white seeds. 85 days.

**Early Kansas** — New variety, early. Large, oval, dark green with light green striping. Flesh solid deep red; texture fine; tender; delicious flavor. 80 days.

**Kleckley's Sweet**—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 85 days.

**Stone Mountain** — Also called Dixie Belle. High quality shipping variety. Fruits very large, oval-round, blunt ends. Dark green, tough rind. Flesh rich scarlet, fine grained, sweet. Seed white with black tips. 90 days.

**Tom Watson**—Outstanding red heart strain. Large fruit, uniform cylindrical, with tough, elastic rind, faintly veined. 90 days.

## MUSTARD

**Southern Giant Curled** (Long standing)—Popular curled-leaf for spring or fall planting. Pleasing mild flavor and very large. 35 days.

**Spinach Mustard or Tendergreen**—Wholesome, quick-growing green, combining mustard and spinach flavors. 28 days.

## OKRA or GUMBO

**Dwarf Green**—Early, prolific dwarf-growing sort. Dark green fluted, 5 to 7-in. pointed pods. 50 days.

**White Velvet**—Early and prolific. Pods pale greenish-white, 6 to 7-in. long. Meaty, tender. 62 days.

## ONIONS

### Red Varieties

**Red Wethersfield** — Popular, good keeper, used extensively for sets. Medium large, flat bottomed bulbs with sloping top. Purplish-red. Fine grained flesh, firm, slightly flushed with pink. 100 to 102 days.

**Southport Red Globe**—Finest of all red onions. Perfectly round, good sized bulbs with thick, small necks. Skin is deep purplish-red. Strong flavored flesh, white tinged with pink. Good keeper, productive. 112-114 days.

### White Varieties

**Southport White Globe**—Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained. Keeps well in fall. 110 to 112 days.

**Sweet Spanish** — Pearl-white color, mild flavor. Solid and crisp. Largest of the white onions. 110 days.

**White Portugal or Silverskin**—Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler. 100 to 102 days.

### Yellow Varieties

**Prizetaker**—Large, globe shaped, with glossy, thin straw-colored skin. Coarse, mild flesh. 102 to 104 days.

**Southport Yellow Globe** — Globe shaped, medium to large bulbs. Solid yellow, tough clinging skins. Creamy white flesh. 114 days.

**Sweet Spanish**—Large, globe-shaped, exceptionally mild and sweet—excel-

lent for eating raw or boiled. Light yellow skin and pure white, firm, crisp, and tasty flesh. 112 days.

## ONION PLANTS

Sturdy, hardy plants that come to you all ready to set out. Ask for latest prices.

## ONION SETS

The quickest way to get onions early. We offer choice, select, dry sets, of the highest quality. (Prices on application.)

**WHITE GLOBE.**

**RED.**

**YELLOW.**

## PARSLEY

**Hamburg or Parsnip Rooted**—Deeply cut, plain leaves. Edible roots, thick and fleshy. 10 to 12-in. long. Used for flavoring. 90 days.

**Moss Curled or Triple Curled**—Compact, dark green leaves, curled and fine-cut. 70 days.

**Plain or Single**—Leaves dark green, flat, deeply cut, but not curled. 60 days.

## PARSNIP

**Hollow Crown** — The most generally grown kind. Roots 2½ to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned. 95 days. Pkt. 10c.

## PEAS

*For increased yield, inoculate! Garden peas, like all legume crops, will almost always benefit by inoculation. Both quantity and quality of the crop are increased when the beneficial nitrogen-fixing bacteria are present in sufficient numbers.*

### Early and Second Variety

**Alaska**—Wilt resistant. Used for canning and early home garden. Blunt, straight, light-green, 3-in. pods with 6 to 8 good quality small peas. Plant 32-in. 60 days.

**Laxton's Progress** — Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4½ to 5-in. long, with 7 to 9 large peas. 62 days.

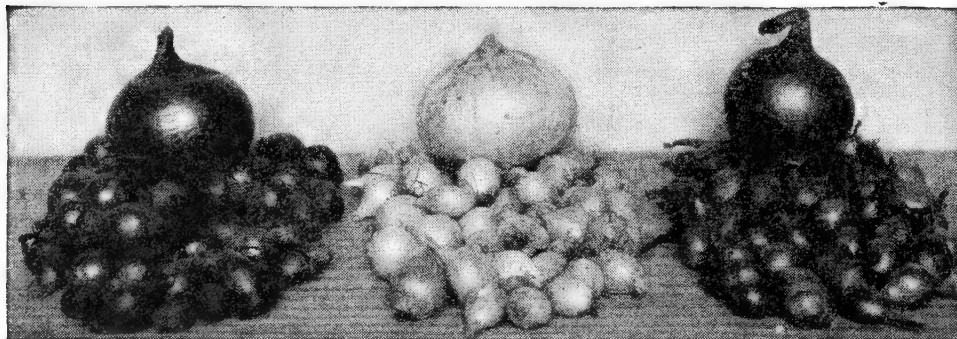
**Little Marvel** — Outstanding dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt, plump, well filled with 7 to 8 medium sized, light green tender peas. 62 days.

**Thomas Laxton** — Medium height. Strong vine bears numerous dark green, blunt ended pods, 4 to 4½-in. Retains flavor and sweetness. One of earliest. 57 days.

### Later Varieties

**Alderman** — Large podded variety of the Telephone family. Excellent for home garden, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contains 8 to 10 peas of highest quality. Seed large, wrinkled, light green. 74 days.

## For earlier onions...better onions...plant SETS



### Grow Onions from Sets

For the home gardener, growing onions from sets saves labor, makes good results more certain, gives you onions ready to use (as green onions) in 2 to 3 weeks and mature onions about a month earlier than those grown from seed.

Plant as soon as ground can be worked. Set in 12-in. drills, about 3 in. apart, and covered lightly. Cultivate well and fertilize. When ready for use, pull every other onion in the row, allowing balance to mature.

### All Vegetable Seeds

**10c PER PACKET**  
**UNLESS OTHERWISE NOTED**

In bulk quantities at money-saving prices.  
Special quotations to market gardeners.  
Prices subject to change without notice.



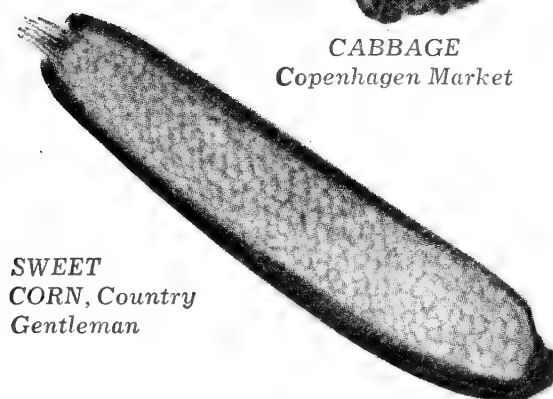
# Planting Guide

## FOR VEGETABLE GARDENS

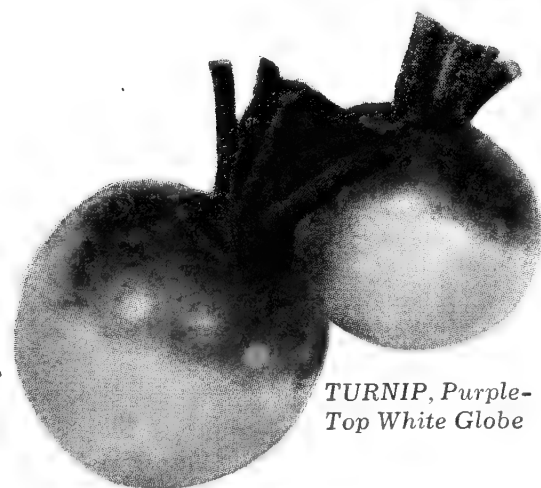
**CARROT**  
*Imperator*



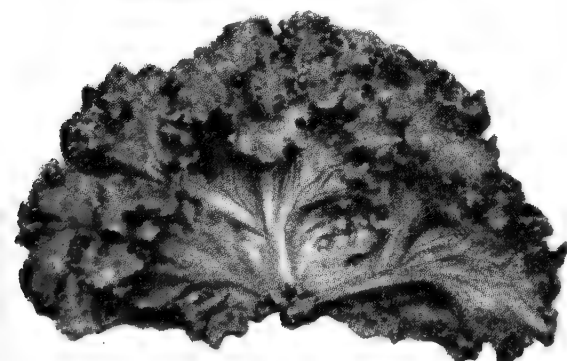
**CABBAGE**  
*Copenhagen Market*



**SWEET  
CORN**, *Country  
Gentleman*



**TURNIP**, *Purple-  
Top White Globe*



**LETTUCE**, *Grand Rapids*

	Seed Required for 50 Ft. of Row	Distance Between Rows (Inches)	Distance Apart in Row (Inches)	Depth of Planting (Inches)	Approximate Yield per 50 Ft. of Row	Seed Required Family of 5
Artichoke	1/8 oz.	36 to 48	18 to 24	1/4		
Asparagus	1/2 oz.	14 to 24	3 to 6	1	25 lbs.	1 1/2 oz.
Beans, Bush	1/2 lb.	24 to 30	2 to 3	1 1/2 to 2	20 qts.	2 lbs.
Beans, Bush Lima	1/2 lb.	18 to 24	2 to 3	1	32 qts.	1 lb.
Beans, Pole	1/2 lb.	36 to 48	6 to 8	1 1/2 to 2	30 qts.	1 lb.
Beans, Pole Lima	1/4 lb.	36 to 48	6 to 8	1 1/2 to 2	1 1/4 bu.	1 lb.
Beets, Table	1/2 oz.	14 to 24	3 to 4	1/2 to 1	1 1/4 bu.	2 oz.
Beets, Mangel	1/2 oz.	20 to 28	3 to 4	1		
Broccoli, Heading	1/8 oz.	24 to 30	24	1/2	50 head	1 pkt.
Brussels Sprouts	1/8 oz.	24 to 30	12 to 18	1/2	15 qts.	1 pkt.
Cabbage	1/4 oz.	18 to 36	14 to 24	1/2	35 to 50 head	1/4 oz.
Chinese Cabbage	1/2 oz.	18 to 24	12 to 15	1/2	40 to 50 head	1 pkt.
Carrots	1/4 oz.	16 to 24	1 to 3	1/2	24 qts.	1/2 oz.
Cauliflower	1/4 oz.	24 to 30	20 to 24	1/2	25 to 30 head	1 pkt.
Celery	1/8 oz.	24 to 40	4 to 6	1/4	75 to 100 stalks	1 pkt.
Collards	1/4 oz.	24 to 30	14 to 18	1/2	3 bu.	1 pkt.
Corn, Sweet	4 oz.	30 to 42	9 to 12	1	100 ears	1 lb.
Corn, Pop	3 oz.	34 to 40	6 to 8	1		
Cucumber	1/2 oz.	48 to 60	12 to 36	1/2 to 3/4	75 to 100 fruit	1/2 oz.
Dill	1/4 oz.	18 to 36	4 to 8			
Egg Plant	1/8 oz.	24 to 36	18 to 24	1/2	70 to 80 fruit	1 pkt.
Endive	1/2 oz.	18 to 24	8 to 12	1/2	50 to 60 plants	1 pkt.
Kale	1/2 oz.	24 to 32	14 to 22	1/2	50 plants	1 pkt.
Kohlrabi	1/4 oz.	14 to 24	4 to 6	1/2	1 bu.	1 pkt.
Leek	1/4 oz.	12 to 42	2 to 4	3/4		1 pkt.
Lettuce	1/4 oz.	12 to 18	4 to 12	1/4	25 lbs.	2 oz.
Muskmelon	1/2 oz.	70 to 80	36 to 60	3/4	50 to 60 fruit	1 pkt.
Mustard	1/4 oz.	14 to 24	6 to 9	1/2	1 to 1 1/2 bu.	1/2 oz.
Okra	1 oz.	36 to 48	24	1	450 pods	1 pkt.
Onion	1/4 oz.	18 to 24	3 to 4	3/4	1 bu.	1/2 oz.
Onion (for sets)		12 to 14	not thinned	3/4	300 scallions	
Onion sets	1 pt.	12 to 18	2	1	60 bunches	1 qt.
Parsley	1/4 oz.	12 to 20	6 to 8	1/2	45 bunches	1 pkt.
Parsnips	1/2 oz.	18 to 24	3 to 4	1/2	1 bu.	1/2 oz.
Peas	3/4 lb.	24 to 36	1 to 2	1 to 2	30-50 qts. pods	3 lbs.
Peppers	1/8 oz.	20 to 30	18 to 20	1/2	25 doz. peppers	1 pkt.
Pumpkin	2 oz.	96 to 108	60 to 84	3/4	25 to 35 fruit	1 pkt.
Radish	1/2 oz.	12 to 18	1 to 2	1/2	50 bunches	3 oz.
Rhubarb	1/2 oz.	24 to 48	18 to 24			
Rutabaga	1/8 oz.	18 to 24	6	1/2 to 1		1 pkt.
Salsify	1/2 oz.	18 to 24	2 to 4	1/2		1 pkt.
Spinach	3/4 oz.	14 to 18	3 to 5	3/4	1 1/2 bu.	1 oz.
Spinach, N.Z.	1/2 oz.	30 to 36	12 to 18	1	35 to 50 lbs.	1 oz.
Squash, Summer	1/4 oz.	36 to 48	48 (4 seeds)	1	60 to 70 squash	1 pkt.
Squash, Winter	1/4 oz.	72 to 90	72 (4 seeds)	1	35 to 40 squash	1 pkt.
Swiss Chard	1/2 oz.	12 to 18	4 to 6	1	25 lbs.	1 oz.
Tomato	1/16 oz.	40 to 60	36 to 40	1/2	2 bu.	1 pkt.
Turnip (roots)	1/4 oz.	18 to 24	2 to 4	1/4	1 bu.	1/2 oz.
Turnip (greens)	1/2 oz.	12 to 18	2 to 4	1/4	1 1/2 bu.	1 oz.
Watermelon	1/2 oz.	72 to 96	72 to 96	3/4	20 fruit	1 pkt.

# VEGETABLE GROWING CHART

**ASPARAGUS.** Seed should be soaked 24 hours before planting—and covered 2" deep in the garden. Thin young plants to 1" apart. Cultivate often. Set in permanent beds in spring.

**BUSH BEANS.** Do not plant until danger of frost is past. Press soil firmly around seeds. Thin young plants to about 6" apart. Cultivate only before blooming and never when wet. Pick frequently. Make plantings every two weeks for supplies throughout the season.

**POLE BEANS.** Plant about same time as Bush Beans. Poles 5' to 8' long should be driven into ground in rows about 4' apart with spacing of 3' in row. Run rows north and south. Plant 5 to 8 beans around each pole, thinning to 4 plants later. Hoe frequently.

Caution: To avoid spreading plant diseases, do not cultivate or pick when plants are wet.

**BEETS.** Plant about same time as radishes in deep, sandy loam. Have soil fine and loose and press down firmly around seed. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart. Plant every 10 days or so.

**BRUSSELS SPROUTS.** Easy to grow wherever conditions are favorable for late cabbage, and requires same culture.

**CABBAGE.** Set out as soon as frost danger is past. Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large. For winter storage, stand plants upright in cold cellar, with roots in sand. Slight freezing will not harm cabbage.

**CARROTS.** Sow early and thinly—in light, deep soil, preferably fertilized the previous season. Thin plants when about 2" tall. Keep on cultivating frequently throughout season.

**CAULIFLOWER.** Follow same methods as for cabbage except that heads must be protected from sunlight to assure the desirable white curd. Gather and tie the tops of leaves together loosely to shut off light. Do not cramp the heads.

**CHINESE CABBAGE.** An easily raised succession crop. Set out in rows which have been occupied by earlier vegetables.

**COLLARDS.** Sow seed thickly in rich ground and transplant when about 4" high—or if plants are to remain where sown, spread the seed more thinly, and when young plants are well started, space them out to 2' or 3' apart in the row.

**CORN.** Do not plant until all danger of frost is past. Be sure soil is

well worked and dry—then drop 6 kernels of corn in a shallow hole made with the corner of the hoe. Cover each "hill" with about 1" of fine soil pressed down firmly. When 6" high, thin to three or four plants in each hill. Hoe often, but not deeply.

**CUCUMBER.** The best soil is warm, sandy loam—preferably on a slight southward slope. Be sure all danger of frost is past, and that soil is fairly moist and loose. Plant 8 or 10 seeds to the hill. When 6" tall, thin to 3 in a hill. Take fruit as soon as it reaches picking stage.

**EGG PLANT.** Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

**ENDIVE.** Sow at intervals for continuous supply. When well started, transplant or thin to 1' apart. To blanch, tie outer leaves together over the center when plant is nearly grown. Just before killing frosts in fall, dig the plants, taking plenty of soil with roots—pack closely together and store in dark cellar for winter use.

**KALE or BORECOLE.** Requires moist, well enriched soil. Pick leaves as wanted, or pull whole plant. Leaves are best after a frost.

**KOHLRABI.** Sow early as possible in light, rich soil. When plants are in the third leaf, thin to 6" apart. Plant at intervals of 10 days for succession of bulbs until hot weather—after which they do not grow. Use while still young and tender, before skin hardens.

**LETTUCE.** Sow as soon as ground can be worked—or for extra early crops start indoors and transplant when danger of heavy frost is over. Repeat sowing every 2 weeks to insure continuous supply. For leaf lettuce, thin plants to 6" apart. For head lettuce, thin to 8" spacing, in rows 18" apart. Lettuce grows best and heads best in cool, moist weather.

**MUSKMELON.** Requires long season to develop and is easily injured by frost, or even by cool weather. Before planting, spade in liberal forkful of well rotted manure in each hill. Thin plants to 4 per hill after third leaf develops, and train vines in different directions. Cultivate as long as possible. On moist ground use shingles to hold melons off ground to prevent rotting.

## PEAS — Later Varieties Continued

**Dwarf Telephone or Daisy** — Large pods, 4½-in. long, broad, straight and pointed, containing 7 to 9 large round peas. Vines about 24-in. tall. A popular main-crop pea. 79 days.

**Telephone**—Dark podded, most popular late variety. Pods 4½ to 5½-in. long, very large; vine about 40-in. tall. 75 days.

### Edible Podded or Sugar

**Mammoth Melting Sugar** — Wilt resistant. Coarse light-green vine, 54-in. Single 4½-in. pods, broad, indented, light, blunt, stringless, without fiber, fleshy. Contain 7 peas. Seed large, round, creamy-white. 74 days.

## PEPPERS — Sweet

**California Wonder Improved**—Number one quality peppers, about 4-in. long and 3½-in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkably thick walls, tender, sweet. 75 days.

**Pimento** — Excellent for canning or stuffing. Smooth, heart-shaped, very thick flesh. 73 days.

**Ruby King**—Abundant, tapering fruit, dark-green changing to ruby-red. 69 days.

**World Beater**—One of the best large peppers. Glossy-green, changes to bright red. Mild, very sweet, thick flesh. 75 days.

### Hot

**Hungarian Wax**—Slender, waxy yellow fruit about 6-in. long, turns red when ripe. Very hot. 65 days.

**Long Red Cayenne**—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. 70 days.

**Red Chili** — Low, spreading, 18-in. plant. Extremely pungent fruit. Erect, conical. 82 days.

## PUMPKIN

**Connecticut Field** — Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet and coarse. 118 days.

**Green Striped Cushaw**—Medium size, smooth, crookneck shaped, white with green mottling and stripes. Thick yellow flesh. 115 days.

**King of the Mammoths**—Largest of the pumpkins weighing 60 lbs. and upward. Yellow skin mottled with orange. Deep orange flesh. 115 to 120 days.

**Kentucky Field** — Dull orange, large ribbed fruit. Coarse, deep yellow flesh, good flavor. 120 days.

**Small Sugar or New England Pie** — Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh. 118 days.

## RADISH

**Crimson Giant** — Large round, 1 to 1¼-in. Deep crimson roots. Very crisp and tender for its size. 28 days.

**Early Scarlet Globe**—Globular, slightly elongated, bright scarlet. 24 days.

**Early Scarlet Turnip, White Tipped** — Carmine red with white tip. Flesh white, crisp and mild. 26 days.

**French Breakfast** — Roots thicker toward bottom. 1½-in. long by ½ to ¾-in. Dull scarlet, white tipped. 25 days.

**White Icicle**—Tapering roots 5 to 5½-

## RADISH — Continued

in., very white with pure white, mild flesh. 27 days.

**White Strasburg**—Popular white summer variety. 4 to 5 in. long. Tapered and smooth. Thicker than White Icicle. 40 days.

### Fall and Winter Varieties

**Rose China Winter**—Popular, very distinct winter sort. Good for late salads. Cylindrical blunt, smooth, bright rose-red. Flesh white, very firm and pungent. 52 days.

**Long Black Spanish**—Good keeping winter variety. White, crisp and pungent. 8 to 9 in. long, slightly tapered. 58 days.

**Round Black Spanish**—Black-skinned, with pure white flesh, crisp, solid and pungent, 7 to 10-in. long and 2 to 3-in. thick. 60 days.

## SPINACH

**Bloomsdale Savoy, Long Standing**—A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer. 42 days.

**New Zealand**—Thrives in dry, hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked. 70 days.

**Nobel Giant, Thick-Leaved**—Large, vigorous, spreading plant, slow to form seed stalks. Extremely heavy yielder. Very deep green leaves. 45 days.

*Spinach seed is scarce this year.*

## SWISS CHARD

**Lucullus**—Most popular Chard. Upright in growth, with yellowish-green curled, crumpled leaves. Thick, broad and light green stems. 50 to 60 days. Pkt. 10c.

## SQUASH

### Summer Varieties

**Cocozelle or Italian Vegetable Marrow**—A long Italian squash. 18 to 24 inches long and 4 in. thick. Dark green marked with yellow and light green. 60 days.

**Early Prolific Straightneck**—Earlier, smaller, and more productive than Giant Summer Straightneck and more uniform. Brilliant yellow. Fine for home or market. Pkt. 10c.

**Early White Bush Scallop**—Fruits greenish when young, become white at maturity. 3-in. long, 7½ to 8½-in. wide. 53 days.

**Giant Summer Crookneck**—Prolific, bush type plant, curved neck fruits around 4 to 5-lb., 20 to 24-in. long. 4 to 5-in. diameter. 56 days.

**Zucchini Fordhook**—Honorable mention. Long, slim and very dark green. Bush-like plants small enough for any home garden. Easy to grow. 60 days.

**Zucchini Bush**—About 6 in. long at edible stage. Flesh greenish-white and tender. 56 days.

### Fall and Winter Varieties

**Golden Table Queen**—All-America medal 1939. Skin is deep golden, flesh orange, dry, fine flavor and texture.

**Table Queen or Des Moines**—Acorn-shaped, green, deeply furrowed; flesh rich yellow, dry, mealy, delicious. Convenient size for baking and serving in halves. 100 days.

**Warted Hubbard**—Large, very dark green shell and heavily warted. Flesh deep orange and of excellent quality. 120 days.

# VEGETABLE GROWING CHART

**OKRA or GUMBO.** Do not plant until ground is warm, as this is a tender, hot weather plant. Pick pods before they develop woody fibres.

**ONION SETS.** Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant sets right side up and cover with garden rake; then firm the soil well over the sets.

**ONION.** Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Those left to become fully ripe can be stored for winter. Cultivate and hand weed crop every 2 weeks during summer.

**PARSLEY.** Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water over night before planting. Sow early and not too deeply. When curled varieties are about 3" tall, cut off all leaves. The new growth will be brighter and better curled.

**PARSNIP.** Plant in rich, sandy loam, thoroughly pulverized. Seed requires plenty of moisture for germination and should be sown early. Dig after a killing frost. Freezing improves parsnips, so some can be left in the ground all winter and used in spring. For storage, bury in dry sand.

**PEAS.** For early crop, plant in light, rich soil. For general crop, a rich loam or clay soil is best. Plant at 2-week intervals for continuous supply. Soak seeds in water the night before planting. Peas need moderate temperature, plenty of moisture. Light frosts do not injure them so they may be planted early in spring. Varieties more than 1½' tall should be staked when 4" to 6" tall.

For increased yield, **INOCULATE!** Garden peas, like all legume crops, almost always benefit by inoculation. Quantity and quality of the crop are increased when the beneficial nitrogen-fixing bacteria are present in sufficient numbers.

**PEPPERS.** Warm, mellow soil in sheltered location is best. Start under glass. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.

**PUMPKIN.** Cultivate practically the same as melons or cucumbers.

**RADISH.** Soil should be light, quick and rich to insure rapid growth. Slow growth makes the

flavor too strong. Sow as early as ground can be worked, as Radishes are very hardy. Make successive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.

**RHUBARB.** Sow in cold frame in spring and transplant into rows as soon as plants are large enough. In fall or the following spring transplant to permanent location in rows 3' to 5' apart each way. Stalks should not be taken for use the first year.

**SPINACH.** Plant very early in spring—or start seed in fall (giving it protection by 3" of straw over the winter) and enjoy an early spring crop. Cut all spinach before hot weather as it doesn't do well in extreme heat. Sow again in August or September for fall crop. Spinach should be gathered before the flower spike appears.

**SQUASH.** Plant about same time as corn—and in hills. Does best in rich, sandy loam, and is helped by fertilizing the hills. When in the third leaf, thin to 4 plants per hill. Cover every fourth joint with earth to encourage extra root formation. Bush varieties may be planted in hills 3' to 4' apart.

**SWISS CHARD.** Requires about same treatment as beets. Cultivate frequently. Leaves may be gathered during summer and fall. New ones will grow quickly.

**TOMATOES.** Do best in sandy, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out, 3" apart, in boxes or pots—later transplant into the garden. Or keep in flats until all danger of frost is past, and then set plants out directly into the garden. Water around the roots of the plants when setting them out, if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.

**TURNIPS.** For summer greens or roots, sow as early as radishes and lettuce. Thin out when plants are 1" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and texture.

**WATERMELON.** Requires about same culture as muskmelon, except the vines need more room. Fertilize each hill liberally and cultivate thoroughly.





Growing food at home is just plain good sense. Millions of Americans last year found that vegetables F.O.B. the kitchen door taste better than any they can buy. What's more, scientists tell us that only fresh vegetables contain the all-important vitamins in abundance. That is why most of our home gardeners will continue to grow food at home even though the war emergency may seem to be over.

To help you grow better vegetables and to answer the questions that home gardeners asked during last season, we have completely revised our "GARDEN GUIDE POSTS" for this issue of our catalog.

For Veteran Gardeners

Even old timers will find these notes worth saving for the many items of information that every gardener needs from time to time—when to plant, how deep, how much seed to buy, etc.

For New Gardeners

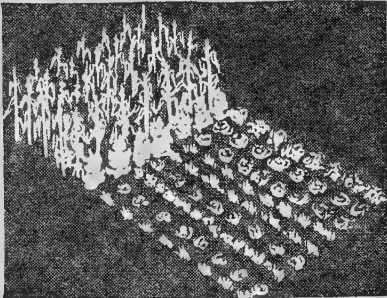
We've tried to make this a pocket encyclopedia of gardening, with all the basic facts you need condensed in the shortest and simplest form possible. Most of your questions can be answered by referring to the information given below.

SITE AND SOIL

Most of us have no choice in either site or soil and must work with what we have, but if selection is possible, keep these principles in mind:

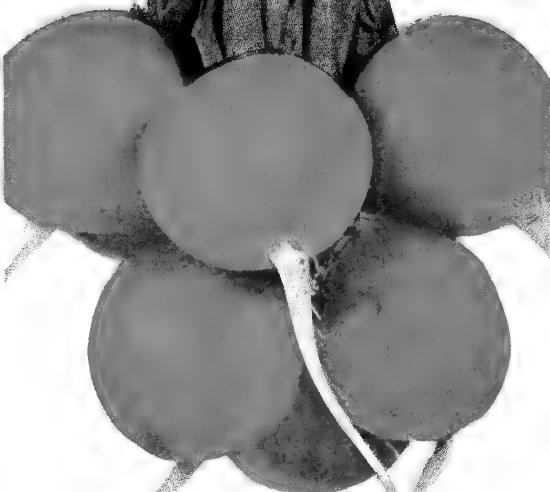
- 1. Locate the garden in an open spot that receives at least six hours of direct sunlight each day, away from the roots of trees that might rob the soil of moisture and fertility.
- 2. A rich sandy loam is the best garden soil, but if you have either heavy clay or light sand, the same materials will improve both—decayed vegetable matter—old rotted manure, peat moss, commercial humus or well-rotted leaves.
- 3. Don't apply lime unless it is really needed. Usually a soil that will grow good beets is all right. If beets do poorly and grow irregularly, you can add about 50 lbs. of hydrated lime or 100 lbs. of ground limestone to each 1,000 square feet of garden. If you have a pH tester, most flowers and vegetables will do well in a soil between 6.0 and 7.0.

- 4. Do apply fertilizer. Apply 30 lbs. of good general fertilizer like 4-12-4 or 5-10-5 to every thousand square feet and you won't have to worry about any deficiencies.
- 5. Don't plant in wet ground. No soil is right for gardening that can't pass the "mud pie" test. To make a mud pie test, pick up a handful of soil and squeeze it slightly. If it balls or packs together and won't crumble when you apply light pressure, it is too wet to work.



8 KEY POINTS IN YOUR PLANNING

- 1—On level ground, you can run rows either east and west or north and south. If east-and-west layout is used, be sure to plant taller vegetables to the north. On sloping ground, the rows must run across the slope, not up and down. Otherwise all your plant food and much of your topsoil will go down the hill when it rains.
- 2—Divide the garden into three sections if possible, (1) Root vegetables (2) Leaf vegetables and (3) Fruit vegetables. By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn't absolutely necessary, but it is one of those details that the smart gardener watches.
- 3—Plan to use your garden full time. To do this, you'll need catch crops, intercrops (also called companion crops) and succession crops. Catch crops are early vegetables, like spinach, that you grow very early before a crop like late cabbage is set out. Intercrops are planted between the rows of larger vegetables, like head lettuce between rows of Broccoli. Succession crops are catch crops in reverse—they follow early crops. For instance, Chinese cabbage will mature fine heads if planted after an early crop of peas has been taken off.



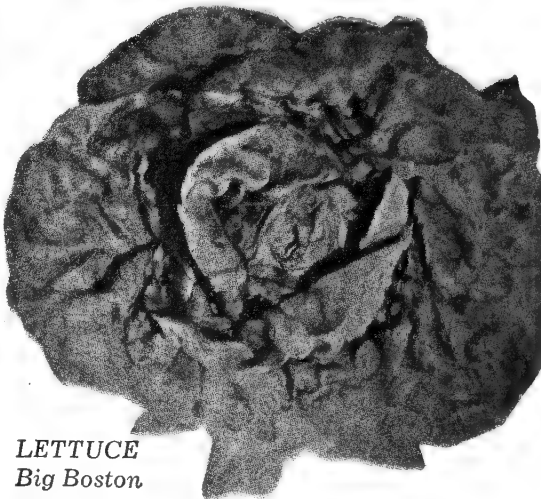
RADISH, Early Scarlet Turnip



BEANS, Golden Wax



BEET, Detroit Dark Red



LETTUCE Big Boston

# TOMATOES

**Beefsteak** — Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use. 90 days.

**Bonny Best** — Second early variety, valuable for canners. Medium vine, not very hardy. Medium-sized, apple-shaped, solid fruits, bright scarlet. Start indoors and set out after all danger of frost is past. 73 days.

**Earliana or Spark's Earliana** — Open, spreading, medium small vines. Red fruits run to medium size. This seed is selected for thick, smooth fruit. 66 days.

**Golden Queen** — Good for juice and for home gardens. The fruit is a deep golden yellow color, and vines medium large. Very mild flavor, smooth and solid. 84 days.

**John Baer** — Thick, scarlet (similar to Bonny Best). Smooth, firm, medium large fruit. 70 days.

**Jubilee** — Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season. 72 days.

**Marglobe** — Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth, and solid. Deep red. 77 days.

**Ponderosa** — One of the largest varieties. Spreading large vines. Solid, fine flavored, pink, with small seed cells. Somewhat rough and flat. Have a tendency to crack. 88 days.

**Pritchard** — A cross between Marglobe and Cooper's Special, developed by U.S. Department of Agriculture. Large, solid, smooth, round fruit with thick walls. Rather light scarlet. 73 days.

**Rutgers** — Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, with thick walls. Red, firm flesh, low acidity. 72 days.

## Small Fruited

**Red Cherry** — Small round fruits, 1/2 inch in diameter. For salads and pickling.

**Red Pear** — Bright red, pear shaped, distinctive flavor.

**Red Plum** — Resembling a plum in shape. Grown for preserves.

**Yellow Pear** — Differs from Red Pear only in color.

**Yellow Plum** — About 2 in. long. Shaped like a plum: Light yellow in color.

## TURNIP

**Golden Ball** — Medium size, deep yellow with bronze-green top. Creamy yellow flesh of fine texture. 65 days.

**Purple Top White Globe** — All purpose variety. Large, sweet tops. Smooth, globe-shaped roots, purple-red above, white below. Sweet, tender, crisp white flesh. 50 to 60 days.

**Purple-Top Strap Leaf** — Home and market garden variety. Deep purplish-red on top, white below. Flesh white and never stringy.

## TURNIP—FOLIAGE

**Seven Top or Winter Greens** — Very hardy. The young shoots are tender. Roots tough and unsuitable for food. Popular in the South. 45 days.

## Rutabaga or Swede Turnip

**American Purpletop** — Hardy and productive. Tender, firm, light yellow, sweet flesh. 88 days.

(Cont'd from preceding page)

4—Avoid growing vegetables your family doesn't like and won't eat, but be sure to include plenty of those they do like. If they're fond of beans, for instance, don't be satisfied with a single large planting, but make several smaller plantings at two weeks intervals.

*From thousands of reports received from home gardeners on last year's results, Tomatoes, Swiss Chard, Green Beans and Carrots produced the most food with the least effort. Concentrate on these if your space is very limited.*

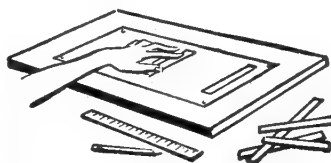
5—In smaller gardens, don't plant space-wasting crops like Potatoes, Pumpkins, Sweet Corn and Vine Squash. On the farm these can be grown with the field crops, saving the more highly cultivated garden space for the more productive vegetables that need closer attention.

*Many gardeners last year reported that Zucchini and other bush squashes gave better results than Eggplant and satisfied many of the requirements for vining Squashes.*

6—Include perennial vegetables when possible. Rhubarb, Asparagus, Horse Radish and Perennial Onions can be grown on one side of the garden where they won't interfere with plowing or cultivating. Small fruits should be included whenever space will permit, since the quality of home-grown berries is far better than any you can buy.

7—Plan to grow enough vegetables for storing and canning. Remember that correct storage begins with planting (see under Storage) so provide for this when planning your garden and ordering seed.

8—Study the chart on page 15. This will tell you how far apart rows should be, how long each crop takes to mature, and how much space you will need to provide the vegetables your family likes. After you have taken into consideration the crops you want to grow, make a rough sketch showing the location of each crop, with catch crops, intercrops, succession crops indicated.



## MAKE A PERMANENT PLAN

After the rough sketch has been made, this information should be transferred to a larger sheet with the garden drawn to scale.

A scale of one-quarter of an inch representing one foot works very well, because by using 1/16 of an inch as three inches, almost any standard spacing of the rows can be shown in exact scale. Save this plan from year to year so you can remember where each crop was. This will enable you to rotate root crops, leaf crops and fruit crops.

With the plan complete, you are now ready to order your fertilizer, seed, tools and insecticides. It is to your advantage to do this as early as you can. Late in the season many desirable varieties may be sold out, deliveries may be slow and clerks are so busy that they can't help you as well.

## STARTING SEED INDOORS

Many plants can be started indoors or in coldframes or hotbeds outdoors for earlier crops.

Any gardener can do this, but it cannot be done carelessly if good plants are to be grown. If care cannot be given, it would be better to sow crops like Tomatoes and Cabbage direct out of doors because direct-seeded plants will produce bigger crops than will transplants that have been damaged by high heat and too little water.

Tomatoes, Cabbage, Cauliflower, Broccoli, Peppers and Kohlrabi can be started indoors. Use a box three inches deep and of any suitable size. Space the bottom boards about an eighth of an inch apart to provide drainage. Sift soil and use the coarser part in the bottom, with an inch of fine soil on top. Press around edges of box with a brick or board to firm the soil. Add more sifted soil and draw the straight edge of a lath or ruler across the top to level.

Press furrows about one-quarter of an inch deep into the soil, the furrows spaced about 2" apart. By treating the seed with Rootone, a plant hormone that speeds up germination and increases the strength of seedling roots, better seedlings which will transplant with less loss can be grown. Plant seeds 3/4" apart to allow room to lift each seedling without disturbing the rest. After seeding, fill furrow with clean sand or sifted soil and press down soil over entire box until it is 1/2" below upper edge.

## WATERING AND TEMPERATURE

Use either a small fly sprayer or a rubber spray bulb that throws a fine mist to water the box after planting. If not available, cover surface with burlap and water through this.

Correct control of moisture is the most important single factor in success with indoor seed sowing. Soil should never be saturated, yet must not dry out at any time until seedlings show second set of leaves, when they can be transplanted outdoors if weather permits.

If seeds of several varieties are grown together, keep box at 70 degrees until seeds germinate, but if only tomatoes and peppers are grown, a temperature of between 75 and 85 degrees will produce better seedlings.

Don't start seedlings too soon or they may become long and spindling. Six weeks before time to set out is soon enough to sow seed indoors, and eight weeks if a hotbed or coldframe is used.

# Answers to QUESTIONS THEY ASK US

## How long should seed be soaked before planting?

No time at all, except in hot dry weather, when it sometimes helps to speed germination by soaking some seed, but never for more than 12 hours. In the spring, when moist soil is overly wet anyway, nothing is gained by soaking seed, and often damage is done. Seeds, like people, expire from oxygen starvation when held under water too long.

## Doesn't squash take up more room than it's worth?

Even the smallest garden should in-

clude some of the bush types of squash, such as Zucchini, and Prolific Straight-neck. They don't need much space, are easy to grow, and give lots of vegetables for little trouble. These small varieties are delicious eating, and can be a new taste treat when baked with cheese, or fried like eggplant.

However, unless your garden is large, stay away from the vine type squash, as it is usually not desirable for growing in small areas.

## My carrots always do poorly. Why?

In almost every case, this is because the seed was sown too thickly, and not

thinned out. Never leave more than one seedling for every 2 or 3 inches of row, and never sow the long, slender varieties of carrots in heavy clay soil.

## In growing sweet corn, what are the advantages of hybrid varieties over the old fashioned types?

Hybrid sweet corn has larger ears, deeper kernels, and is more resistant to certain diseases than the old-time varieties. Too, all the ears mature at the same time, so there is never any doubt as to which ears should be picked first. The stalks are stronger, and hybrid varieties produce more corn per square feet of planting space.

## KNOW YOUR GARDEN ENEMIES!

To find the right treatment for insect enemies, identify them in the "Rogues' Gallery"

below. Then refer to our free Spray Guide Chart for proper treatment in each case.



Cutworms



White Grub



Chicken Louse



Mexican Bean Beetle



Rose Mildew



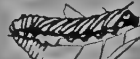
Coddling Moth



Potato Blight



Rose Aphid



Tomato Worm



Potato Bug



White Flies



Sow Bug



Rose Leaf Spot



Rose Midge



Asparagus Beetle



Japanese Beetle



Lace Wing



Potato Flea Beetle



Thrip



Rose Chafer



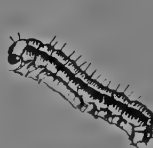
Mealy Bugs



Orthesia



Slugs



Caterpillar



Leaf Hopper



San Jose Scale



Red Spider



Oyster Shell Scale



Aphid



Tarnish Bug

## Why don't I get crisp radishes?

The secret of getting crisp, delicious radishes is quick growth, so use plenty of plant food in the soil, where they are planted. Radishes are the easiest of all vegetables to grow, as the seeds germinate in a few days, and are ready for your table in 3 to 5 weeks. Sow a succession of radish seed every 10 days all through the planting season—grow them quickly and you will have plenty of crisp, tender radishes.

## I never have any luck getting summer-sown seed to grow. What's wrong?

The biggest problem here is because most summer-sown seed are those of cool-weather crops that we want to mature when the cool days come, yet the seed must be started during high summer temperatures.

For success with summer-sown seed, first try chilling the seeds in your refrigerator for several days.

Then, plant the seeds in soil containing lots of decayed vegetable matter so it will hold all the moisture you can pour on. As the moisture evaporates from the surface, it will cool the soil.

If your garden plot is exposed to dry, hot winds, planting summer-sown seed to the lee side of tall plants, such as tomatoes, corn, etc., will keep the dry air from searing the tender seedlings.

After sowing, wet the rows with cool water, and cover with boards until the seeds have sprouted. Remove boards late in the day, or during cloudy weather to prevent the tender seedlings from sunscald.

## I have clay soil in my garden. What can I grow?

When modified with well-rotted manures or humus, clays are rated with our best soils. However, if the clay is stiff and hard, successful growth of root crops, like beets, carrots, turnips and parsnips, is especially difficult, and others are handicapped, too.

## What grows in sandy soil?

You can grow practically everything if the soil is good sandy loam—and this type of soil is perhaps the finest for vegetables. However, sandy soils need plenty of plant food.

Be cautious, though, if the soil is mostly sand, as little will grow here.



## Which vegetables are actually the best for high vitamin content?

All fresh vegetables are high in the vitamins which we all need for proper nourishment. If we could eat enough vegetables fresh from the garden, we wouldn't need to buy our vitamins in pills at the drug store.

But some vegetables are especially high in certain vitamins—

**For Vitamin A**—eat plenty beet greens, broccoli, collards, endive (escarole), mustard greens, and spinach.

**For Vitamin B**—brussels sprouts, kale, green lima beans, and peas.

**For Vitamin C**—beet greens, broccoli, brussels sprouts, cauliflower, kale, mustard greens, peppers and spinach.

**For Vitamin G**—beet greens, collards, kale, mustard greens and spinach.

## What are some good combinations for succession planting? For "inter-cropping"?

The early crops that can be harvested in time to be followed by others are: Early cabbage, cauliflower, lettuce, peas, beets, radishes, carrots, kohlrabi, turnips, spinach, and green onions from sets.

These crops may be followed by:

Peas (in cool sections only), late celery, late plantings of lettuce, beets, carrots, turnips, cabbage, cauliflower, and early varieties of sweet corn.

For late autumn and winter vegetables, plant chinese cabbage, kale, mustard, after your early crops are harvested. For intercropping, plant rows of quick growing items such as lettuce, radishes, or spinach between the wide spaced rows of slower growing vegetables, such as celery, peas and tomatoes.

Set early cabbage between the rows where tomatoes are to be planted later, and bush beans between rows where eggplant and peppers will follow.

## How can I get rid of crab grass?

Crab grass doesn't start until warm weather, so your very first step in fighting this lawn enemy No. 1, is to plant plenty of good seed early, and fertilize early. When your lawn has a vigorous start, it doesn't give the weed an opening.

Next, since crab grass is an annual which propagates itself by re-seeding, treat your lawn with lead arsenate 20-25 pounds per 1000 square feet before last year's crab grass seed has a chance to sprout. Apply this as a dust or spray. Damage to the blue-grass will be avoided if this treatment is followed by application of a fertilizer rich in nitrogen.

Where crab grass has actually appeared, a direct chemical attack is necessary. New weed killers have been perfected which kill the pest without injury to your lawn. (Ask us about them.)

Along with these methods of attack, you can regulate your ordinary routine of mowing, watering, and fertilizing to help the fight on crab grass. High cutting helps, because a thick mat of grass has a better chance to smother the crab grass seedlings. Watering infrequently but heavily helps, too, because the young seedlings can't reach the deep moisture.

# If you want to PLANT BY THE MOON

There is quite a lot of discussion about the effect of the moon on various crops. While we make no attempt to take one side or the other on this question, we are giving all the necessary information in condensed form.

Naturally, we can't vouch for the effectiveness of this method of planting. We are simply submitting the up-to-date charts, etc., for gardeners who observe the phases of the moon when planting.

## Signs of the Zodiac and Their Influence

♈ ARIES: Tends to dryness, barrenness. Fairly good for cultivating, spraying and destroying weeds. Plant onions.

♉ TAURUS: Fairly productive. A good sign for planting root crops, particularly potatoes and bulbous plants.

♊ GEMINI: Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ CANCER: Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ LEO: Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ VIRGO: Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ LIBRA: Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ SCORPIO: Next to Cancer in productiveness. Irrigate but do not dig potatoes.

♐ SAGITTARIUS: Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ CAPRICORN: Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ AQUARIUS: Somewhat barren. Good only for cultivation and extermination of pests.

♓ PISCES: Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

## When to Plant

The table at the right shows when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month, and hour of the day, Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

♈ 1st QUARTER, MOON INCREASING—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leek, Lettuce, Spinach, Barley, Oats, Wheat, Rye.

♉ 2nd QUARTER, MOON IN-

## 1945—Moon Signs and Changes—1945

JANUARY	APRIL	JULY	OCTOBER
2 ♀ 10:52 a.	1 ♂ 9:06 p.	1 ♀ 6:29 p.	2 ♀ 11:36 a.
4 ♀ 10:45 p.	4 ♀ 7:48 a.	3 ♂ 9:04 p.	4 ♀ 10:17 p.
7 ♀ 11:11 a.	6 ♀ 3:26 p.	5 ♀ 11:20 p.	7 ♀ 10:26 a.
9 ♀ 9:53 p.	8 ♀ 7:09 p.	8 ♀ 2:13 a.	9 ♀ 11:16 p.
12 ♀ 5:24 a.	10 ♀ 7:37 p.	10 ♀ 6:48 a.	12 ♀ 11:30 a.
14 ♀ 9:54 a.	12 ♀ 6:39 p.	12 ♀ 2:01 p.	14 ♀ 9:03 p.
16 ♀ 12:26 p.	14 ♀ 6:32 p.	15 ♀ 0:14 a.	17 ♀ 2:28 a.
18 ♀ 2:22 p.	16 ♀ 9:17 p.	17 ♀ 0:29 p.	19 ♀ 4:07 a.
20 ♀ 4:49 p.	19 ♀ 3:57 a.	20 ♀ 0:33 a.	21 ♀ 3:30 a.
22 ♀ 8:35 p.	21 ♀ 2:05 p.	22 ♀ 10:25 a.	23 ♀ 2:54 a.
25 ♀ 2:08 p.	24 ♀ 2:16 a.	24 ♀ 5:15 p.	25 ♀ 4:16 a.
27 ♀ 9:36 a.	26 ♀ 2:52 p.	26 ♀ 9:26 p.	27 ♀ 9:00 a.
29 ♀ 7:09 p.	29 ♀ 2:55 a.	29 ♀ 0:07 a.	29 ♀ 5:12 p.
CHANGES	CHANGES	CHANGES	CHANGES
♈ 6 6:47 a.	♈ 5 1:18 p.	♈ 2 0:13 p.	♈ 5 11:22 p.
♈ 13 11:06 p.	♈ 12 6:29 a.	♈ 9 7:35 a.	♈ 14 3:38 a.
♈ 20 5:48 a.	♈ 19 1:46 a.	♈ 17 1:01 a.	♈ 20 11:32 p.
♈ 28 0:41 a.	♈ 27 4:33 a.	♈ 24 8:25 p.	♈ 27 4:30 p.
♈ 31 4:30 p.			
FEBRUARY	MAY	AUGUST	NOVEMBER
1 ♀ 6:48 a.	1 ♀ 1:39 p.	2 ♀ 5:25 a.	1 ♀ 4:09 a.
3 ♀ 7:22 p.	3 ♀ 10:03 p.	4 ♀ 9:25 a.	3 ♀ 4:29 p.
6 ♀ 6:54 a.	6 ♀ 3:16 a.	6 ♀ 4:29 a.	6 ♀ 5:18 a.
8 ♀ 3:29 p.	8 ♀ 5:21 a.	8 ♀ 10:26 p.	8 ♀ 5:36 p.
10 ♀ 8:11 p.	10 ♀ 5:28 a.	11 ♀ 8:23 p.	11 ♀ 3:54 a.
12 ♀ 9:51 p.	12 ♀ 5:16 a.	13 ♀ 8:26 p.	13 ♀ 11:01 a.
14 ♀ 10:13 p.	14 ♀ 6:57 a.	16 ♀ 8:54 a.	15 ♀ 2:21 p.
16 ♀ 11:07 p.	16 ♀ 0:01 p.	18 ♀ 7:30 p.	17 ♀ 2:46 p.
19 ♀ 2:05 a.	18 ♀ 8:57 p.	21 ♀ 2:28 a.	19 ♀ 2:04 p.
21 ♀ 7:46 a.	21 ♀ 8:44 a.	23 ♀ 6:02 a.	21 ♀ 2:17 p.
23 ♀ 4:00 p.	23 ♀ 9:21 p.	25 ♀ 7:30 a.	23 ♀ 5:13 p.
26 ♀ 2:15 a.	26 ♀ 9:09 a.	27 ♀ 8:36 a.	26 ♀ 0:03 a.
28 ♀ 1:57 p.	28 ♀ 7:23 p.	29 ♀ 10:50 a.	28 ♀ 10:20 a.
CHANGES	CHANGES	CHANGES	CHANGES
♈ 5 3:55 a.	♈ 5 0:02 a.	♈ 7 6:32 p.	♈ 4 5:11 p.
♈ 12 11:33 a.	♈ 11 2:21 p.	♈ 15 6:26 p.	♈ 12 5:34 p.
♈ 19 2:38 a.	♈ 18 4:12 p.	♈ 23 6:03 a.	♈ 19 9:13 a.
♈ 26 6:07 p.	♈ 26 7:49 p.	♈ 29 9:44 p.	♈ 26 7:28 a.
MARCH	JUNE	SEPTEMBER	DECEMBER
3 ♀ 2:32 a.	2 ♀ 9:21 a.	3 ♀ 9:20 p.	3 ♀ 11:29 a.
5 ♀ 2:43 p.	4 ♀ 1:01 p.	5 ♀ 5:39 a.	5 ♀ 11:22 p.
8 ♀ 0:33 a.	6 ♀ 2:22 p.	7 ♀ 3:49 p.	8 ♀ 9:31 a.
10 ♀ 6:34 a.	8 ♀ 3:15 p.	10 ♀ 3:48 a.	10 ♀ 5:19 p.
12 ♀ 8:46 a.	10 ♀ 5:03 p.	12 ♀ 4:37 p.	12 ♀ 10:12 p.
14 ♀ 8:32 a.	12 ♀ 9:22 p.	15 ♀ 4:07 a.	15 ♀ 0:27 a.
16 ♀ 7:58 a.	15 ♀ 5:12 a.	17 ♀ 0:15 p.	17 ♀ 1:03 a.
18 ♀ 9:10 a.	17 ♀ 4:06 p.	19 ♀ 4:17 p.	19 ♀ 1:25 a.
20 ♀ 1:35 p.	20 ♀ 4:35 a.	21 ♀ 5:10 p.	21 ♀ 3:36 a.
22 ♀ 9:34 p.	22 ♀ 4:27 p.	23 ♀ 4:53 p.	23 ♀ 8:49 a.
25 ♀ 8:13 a.	25 ♀ 2:11 a.	25 ♀ 5:32 p.	25 ♀ 5:44 p.
27 ♀ 8:15 p.	27 ♀ 9:34 a.	27 ♀ 8:40 p.	28 ♀ 5:44 a.
30 ♀ 8:51 a.	29 ♀ 2:50 p.	30 ♀ 2:51 a.	31 ♀ 6:32 p.
CHANGES	CHANGES	CHANGES	CHANGES
♈ 6 10:30 p.	♈ 3 7:15 a.	♈ 6 7:43 a.	♈ 4 0:06 p.
♈ 13 9:51 p.	♈ 9 10:26 p.	♈ 14 11:38 a.	♈ 12 5:05 a.
♈ 20 1:11 p.	♈ 17 8:05 a.	♈ 21 2:46 p.	♈ 18 8:17 p.
♈ 28 11:44 a.	♈ 25 9:08 a.	♈ 28 5:24 a.	♈ 26 2:01 a.

CREASING—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Pepper, Pumpkin, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs Cancer, Scorpio or Pisces. The next best signs are Taurus, Libra and Capricorn.

♈ 3rd QUARTER, MOON DECREASING—During 3rd Quarter of Moon plant the follow-

ing: Beets, Carrots, Chicory, Parsnips, Potatoes, Radish, Rutabaga, Onion, Turnip, Tubers.

♈ 4th QUARTER, MOON DECREASING—In 4th or Last Quarter of the Moon turn sod, pull weeds and destroy noxious growths, especially when Moon is in the barren signs, Gemini, Leo, Virgo or Aquarius. If you must plant in 4th quarter, be sure to use the dates given in "Best Planting Dates."

# Growing Notes FOR BULB PLANTERS

## GLADIOLUS

Make small plantings of Gladiolus corms every 10 days from the time Narcissus are in bloom until last flowers on the Peonies and Irises have faded.

Soil must be well-drained. Water if soil is not moist during summer droughts. In heavy soils, plant at bottom of 5 in. deep trench, in light soils, at bottom of 7 in. deep trench. Set in bulbs and cover with 1 in. of soil, gradually filling in trench as shoot grows until soil is level.

If soil is fertilized as described under Vegetable Garden section, no further feeding will be needed. Stake stems if straight spikes are needed and wind is strong.

### Storing Glad Bulbs

Bulbs can be dug for storage seven weeks after last flower fades, but the longer digging can be delayed the better the bulb will keep, unless fall rains may start up growth after a summer dry spell. Bulbs must be dug before ground freezes. Store as close to 33 degrees as possible until February 1st. Then bring into warm room (above 55 degrees) for two weeks and return to 33 degree storage until planting time. This cold-warm-cold treatment will kill all hibernating thrips.

Thrips do come in from outside sources, however. Spray plants from the time shoots show until flower spike appears with following spray: 1½ teaspoons tartar emetic, ¾ cup brown sugar or honey and 1 gal. water. Apply every 8 to 10 days.

## DAHLIAS

Plant single tubers, each with eye or shoot, as clumps make only mass of foliage and poor flowers. Plant at corn planting time, setting tubers at bottom of 6 in. hole and covering with 5 in. of soil, leaving slight depression to catch moisture.

Dahlias need well-drained moist soil and watering during dry spells. Use same fertilizers recommended under Vegetable Garden section. When first flowers are in full bloom, apply a cupful of sulphate of potash (or a double handful of wood ashes) to each plant, plus a cupful of superphosphate, working this mixture into soil.

Dig clumps after a killing frost and store below 40 degrees, but above freezing. In spring wait until sprouts show and divide into single tubers, being careful to include one eye with each tuber.

# BULBS AND TUBERS for Spring Planting

## DAHLIAS

**Avalon**—Fine form, bright golden-yellow. Blooms freely.

**Jersey Beauty**—Supreme among pink Dahlias.

**Jane Cowl**—Deep, massive blooms, buff and old gold petals curled and twisted.

**Mrs. I. De Ver Warner**—Large blooms, old rose suffused lilac.

**Jersey Beacon**—Chinese scarlet, lighter reverse. Long stems.

**Thomas A. Edison**—Gorgeous blooms of rich royal purple.

**Kentucky**—Salmon-pink with yellow and gold blend.

**Monmouth Champion**—Huge brilliant orange flowers, perfect stems.

**White King**—Magnificent large blooms, pure snow-white.

**Pompon Dahlias**—Charming "button" dahlias that require little care but reward you with gorgeous, cut-flowers summer and fall. In mauve, pinks, red, white, bronze, yellow.

## CANNAS

**King Humbert**—Gigantic flowers, orange-scarlet, with bright red markings. Bronze leaved. 5 feet.

**Yellow King Humbert**—Golden-yellow, dotted red. Green foliage. 4 feet.

**President**—The best red Canna. Immense flowers of rich scarlet. Green foliage. 4 feet.

**Hungaria**—The best true pink Canna. Large flower trusses; green foliage. 3½ feet.

**Wintzer's Colossal**—Largest flowering. Vivid, blazing scarlet. Green foliage. 5 feet.

## CALADIUM

**Fancy-leaved Caladium**—Few summer foliage plants can equal it for rich, beautiful color and dramatic effect.

**Elephant's Ear**—One of the largest ornamental plants for beds and borders. Huge green leaves give unusual effect.

## TUBEROSES

One of the most fragrant of all flowers. Tall spikes of double waxy blooms borne on tall stems. Spear-shaped, grass-like foliage. Annual replacement frequently advisable.

## GLADIOLUS

**Bagdad**—Smoky old rose, lighter throat. Very large. 6 to 8 florets on tall, straight spike. Late.

**Beacon**—Brilliant, clear, dark rose, with a pronounced blotch. Florets slightly waved and ruffled. One of the best.

**Betty Nuthall**—Coral-pink, yellow throat markings. Florets of fine texture, large, strong spikes.

**Bit o' Heaven**—Medium-sized florets of orange with a yellow throat. Tall and straight with 9 to 12 flowers.

**Commander Koehl**—Fine red. Tall spike. Florets very large, dark scarlet without markings.

**Charles Dickens**—Bright, radiant purple. Many blooms open at a time, perfect placement.

**Dr. F. E. Bennett**—Fiery orange-scarlet. Very large flowering.

**Debonair**—LaFrance pink, shading into shrimp pink, creamy throat blotch. 6-8 medium size blooms.

**Golden Dream**—Clear, golden-yellow flowers, medium size, tall stems, many open at a time. Late.

**Minuet**—Beautiful, clear light lavender. Considered the best lavender. Very large flower of heavy substance.

**Mother Machree**—Smoky lavender overlaid at edge with salmon-pink. 8-12 medium size blooms. Late.

**Maid of Orleans**—Milky white, with light cream throat. Tall spike, 6-8 perfectly placed florets.

**Picardy**—Rich apricot-pink. Florets extremely large, slightly ruffled and of wax-like appearance.

**Pelegrina**—Dark blue, 6 or more well placed blooms open with most of remaining buds showing color. Early. Best dark blue.

**Red Phipps**—Unusual shade of light red. Medium tall, long flower heads. Late mid-season.

**Rosa van Lima**—Pure self-colored light pink with many flowers open at one time. Strong, straight stem.

**Shirley Temple**—Newly developed prize winner. Enormous creamy white flower with deeper cream blotch on lower petals. Tall and lovely.

**Vagabond Prince**—Iridescent mahogany brown, lighter in throat. Small scarlet blotch on lip. 8-10 medium size blooms open at a time.

**Wasaga**—Clear glowing buff with 4-5 flowers open at a time. Ruffled. Late mid-season.

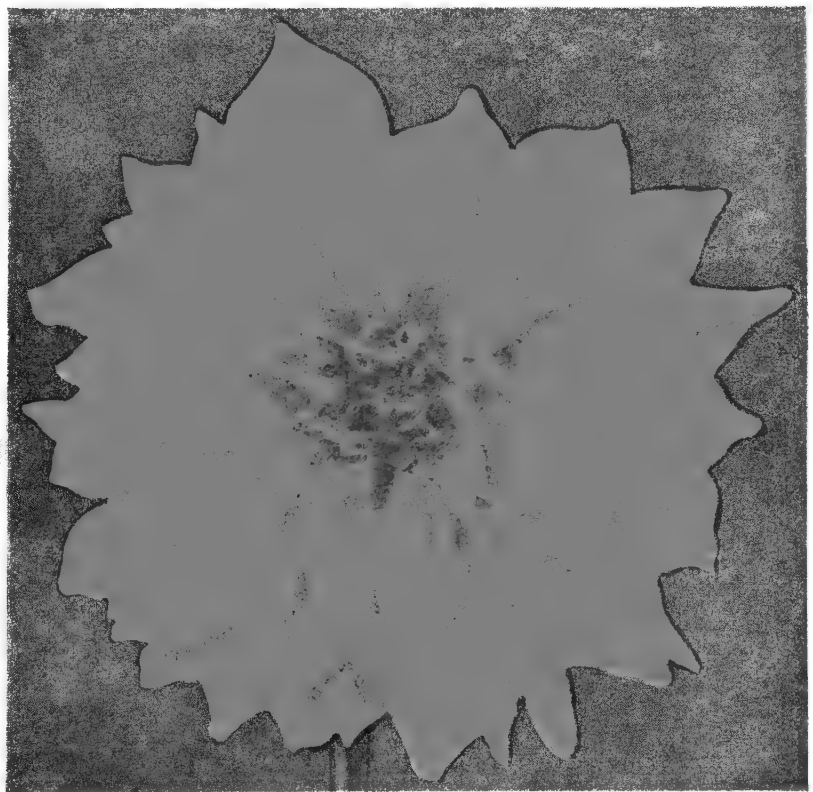




## Bulbs and tubers are a good INVESTMENT

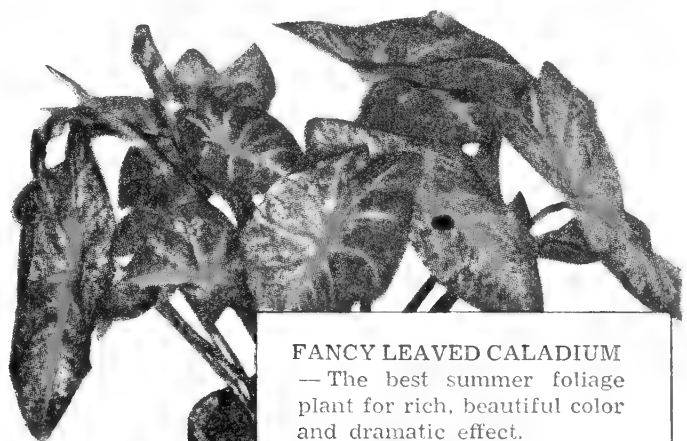
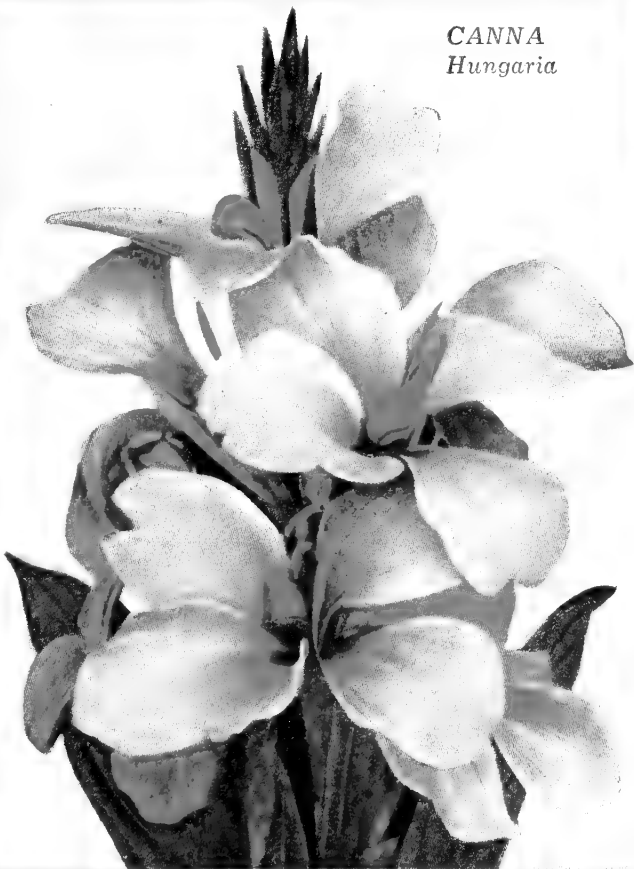
Few garden flowers pay such high dividends as bulbs and tubers!

Lasting for years...they return your investment over and over...by giving so much beauty for such little care, or cost, or effort.



DAHLIA, *Jersey Beacon*

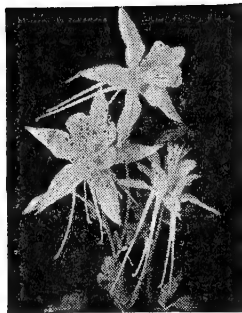
CANNA  
*Hungaria*



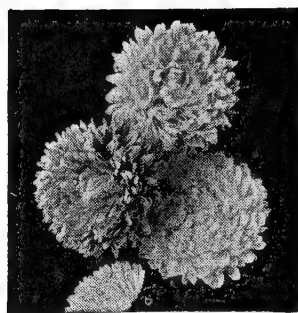
FANCY LEAVED CALADIUM  
— The best summer foliage  
plant for rich, beautiful color  
and dramatic effect.



# Flower Seed DEPARTMENT



AQUILEGIA



ASTER  
American Branching



CENTAUREA  
Jubilee Gem

## KEY TO SYMBOLS

The symbols after the name of each flower give you the following information:

- (a)—Annual
- (b)—Biennial
- (hp)—Hardy Perennial
- (hhp)—Half-hardy Perennial

- Suited to full shade
  - ◆—Suited to semi-shade
- For key to cultures see page 31.

## AGERATUM (a)

*Culture II. Cover 1/8-in. Ht. various. Blooms early summer to frost.*

**Blue Cap**—New, dwarf. Rich, deep blue. 6-in. plants. Pkt. 15c.

**Blue Perfection**—Deep amethyst-blue. 9-in. plants.

**Midget Blue**—1940 All-America. Compact 2 to 3-in. plants. Azure blue. Pkt. 25c.

## ALYSSUM (a) ◆

**ANNUALS.** *Culture II. Cover 1/4-in. Ht. various. Blooms early summer to frost.*

**Carpet of Snow**—White flowers. Plants about 1 1/2 ft. across and only 3-in. high.

**Little Gem**—Clouds of honey-scented white flowers.

**Lilac Queen**—Lavender-lilac flowers, 6-in. plants.

**Violet Queen**—Dwarf, compact, free flowering. Small, sweetly scented flowers; rich, deep shade of violet. Pkt. 15c.

## ALYSSUM (hp) ◆

**PERENNIALS.** *Culture VII. Cover 1/8-in. Ht. 3 to 9 in. Blooms early spring.*

**Saxatile Compactum (Gold Dust)**—Brilliant golden-yellow flowers and grayish-green foliage on compact, spreading plants. Favorite for rock gardens. 12 in.

**ANCHUSA, Blue Bird (a) ◆—Culture II. Cover seeds 1/8-in. Sprays of indigo blue flowers; 20 to 24-in. compact plants.**

## ANTIRRHINUM (a) ◆ (Snapdragon)

*Culture I. Cover 1/8-in. Ht. various. Sow early. They germinate slowly.*

**Maximum (Tallest Varieties)**—Rust-resistant. Best for wealth of flower spikes. *Mixed.* Pkt. 15c.

**Large Flowered (Tall Giant)**—A fine strain for bedding or cutting as the

spikes are heavy and long. *Mixed.* Pkt. 15c.

**Super Majestic (Semi-tall)**—Large flowers on semi-tall plant. Rust-proof. A fine mixture of colors in this type. *Mixed.* Pkt. 15c.

**Half-Dwarf (Large Flowered)**—Very good for bedding. Heavy spikes and good length. Large blooms. *Mixed.* Pkt. 15c.

**AQUILEGIA (Columbine) (hp) ◆—Culture VII. Cover 1/8-in. Ht. 1 1/2 to 2-ft. Prefers light shade, fairly rich soil.**

**Mrs. Scott Elliott's Long-Spurred**—Extremely large flowers, wide range pastel colors. Pkt. 20c.

**ARCTOTIS (Blue-eyed African Daisy) (a)—Culture I. Cover 1/8-in. Ht. 2 1/2-ft. Midsummer to frost. Prefers sun.**

**Grandis**—Pure white blooms, bluish center with gold band.

**ARMERIA (Thrift) (hp)**—Rock-garden or edging plant of bright rose or rose and white. Clustered flowers. Pkt. 15c.

## ASTER (a)

*Culture I. Cover 1/8-in. Ht. various. Need rich soil, good sun.*

**American Branching**—Most popular. 3 1/2 to 4-in. double blooms. Branching. Plants 2 to 3-ft. Long stems. All colors.

**California Giant Improved**—5-in. double flowers, with long curled petals; stems 1 1/2 to 2-ft. long. Branching 2 to 3-ft. plants. All colors. Pkt. 15c.

**Giant Crego (Wilt-resistant)**—Flowers 4 to 5-in. double, with ribbon-like petals curled and twisted. Vigorous, branching 2-ft. plants. Long stems. All colors. Pkt. 15c.

**Giant Crego Navy Blue**—1943 All-America. Large 4-in. long petaled double flowers, deep purple blue, almost blackish blue. True, uniform, 12 to 20-in. branching plants. Pkt. 25c.

**Queen of the Market (Wilt-resistant)**—First to bloom. Nearly round, double, 3-in. flowers, long stems. Plants 18-in., spreading. All colors.

**BABY'S BREATH**—See Gypsophila.

## BACHELOR'S BUTTON (a) (Centaurea or Cornflower)

*Culture IV. Cover 1/4-in.*

**Blue Boy**—Very fine, fully double. Blue. Pkt. 15c.

**Jubilee Gem**—All-America 1937. Compact 1-ft. plants, completely covered with large, double, deep blue flowers. Pkt. 15c.

**Pinkie**—Double, deep pink. Pkt. 15c.

**Red Boy**—Deep glowing red. Pkt. 15c.

**White**—Glistening snow-white.

**Mixed**—

## BALLOON VINE (Love-in-a-Puff)

(a)—*Culture III. Cover 1/2-in. Ht. 8 to 10-ft. Prefers warm location. Rapid-growing climber with white flowers, succeeded by small, balloon-like seed-pods.*

**BALSAM (Lady-Slipper) (a) ◆—Culture II. Cover 1/4-in. Ht. 2-ft. Double, camellia-like flowers. Wants partial shade, plenty of moisture. Sow late.**

**BLUE LACE FLOWER (Didiscus) (a) Culture I. Cover seeds 1/8-in. Ht. 2-ft. Blooms midsummer. Clusters of lavender-blue 2 1/2-in. flowers, like tiny parasols.**

**BURNING BUSH or FIRE BUSH**—See Kochia.

## CALENDULA (a) (Pot Marigold)

*Culture II. Cover 1/4-in. Ht. 18 to 20-in. Midsummer to frost. Grows anywhere. Stands drought and heat. Transplant to 12 to 16-in. apart.*

**Campfire Improved**—Double 4-in. flowers, deep orange. Heavy stems. Pkt. 15c.

**Orange King**—Extra fine, deep orange, dark center.

**Orange Shaggy**—All-America 1935. Deep orange, lighter centers; Chrysanthemum-like blooms.

**Mixed**—

## CALLIOPSIS (a) (Tickseed)

*Culture IV. Cover 1/8-in. Ht. various. Blooms all summer. Bright varied combinations of color.*

**Golden Crown**—All-America 1938. Improved rich yellow, maroon center. Pkt. 15c.

**Tall, Mixed**—Finest large and small-flowered varieties.

**CAMPANULA (Canterbury Bells) (a) —Culture I. Cover 1/8-in. Ht. 1 1/2 ft. Blooms 5 to 6 months after seeding. Bushy plants, bell-shaped flowers, white, pink, blue and lilac.**

**Single**—All colors.

**Single and Double Mixed**—Fine for late summer borders.

**CANDYTUFT (Iberis) (a) —ANNUALS: Culture III. Cover 1/4-in. Ht. 6 to 12-in. Blooms in 8 weeks. Blooms all season if not allowed to seed. Will grow in dry, sandy soil.**

*All Flower Seeds*  
**10c PER PACKET**  
except where otherwise noted

**White Hyacinth**—Large heads of pure white flowers.

**Umbellata Mixed**—Splendid range of colors.

### CANDYTUFT (hp)

**Culture VII.** Cover  $\frac{1}{4}$ -in. Ht. 8 to 10-in. Blooms in early spring and summer. Will grow in dry, sandy soil. Dwarf plants, a mass of flowers, pink, lavender or white.

**CARNATION (a)**—**Culture I.** Cover  $\frac{1}{8}$ -in. Ht. 15-in.

**Chaubaud's Giant** — Double, extra large, clove-scented. Blooms 5 months after seeding. Pkt. 15c.

**CASTOR BEAN (Ricin)** (a)—**Culture II.** Cover seeds  $\frac{1}{2}$ -in. Broad tropical leaves and brilliant colored fruits. Grows 6 to 15 ft. Needs good soil, ample sun and moisture.

### CELOSIA (Cockscomb) (a)

**Culture I.** Cover  $\frac{1}{8}$ -in. Ht. various. Midsummer to frost.

**Childs Type (Chinese Woolflower)** — Forms large heads like wool chenille balls of a bright, rich red. Ht. 2-ft.

**CENTAUREA**—See Bachelor's Button.

**CHRYSANTHEMUM (a)**—**Culture II.** Cover  $\frac{1}{8}$ -in. Ht. 2-ft. Favorite flower for fall bloom. Pleasing color range. Give plenty of room.

**Single Mixed**—

**CLARKIA (a)**—**Culture IV.** Cover  $\frac{1}{4}$ -in. Ht. 2-ft. Graceful, erect, bushy plants, many rosette-like flowers set along stem.



*IPOMOEA, Pearly Gates*

**CLEOME (Spider Plant), Pink Queen (a)**—**Culture II.** Cover  $\frac{1}{4}$ -in. 1942 All-America. A tall, attractive border plant, free from insects and disease, with huge heads of delightful and refreshing pink, without a trace of blue or magenta. The bracts turn to white before falling. Pkt. 15c.

**CLOVER STRAWFLOWER** — See Everlasting Flowers.

**COCKSCOMB** — See Celosia.

**COREOPSIS (hp)** — **Culture VII.** Cover seeds  $\frac{1}{4}$ -in. Ht. 2-ft. Long blooming season. Daisy-like yellow flowers with broad fluted petals. Long stems.

**CORNFLOWER**—See Bachelor's Button.

### COSMOS (a)

**Culture IV.** Cover seeds  $\frac{1}{4}$ -in.

**Dazzler** — Rich deep, velvety crimson maroon Sensation. Immense flowers, 4 to 5-in. across, with broad, heavy, fluted petals. 1943 All-America. Pkt. 25c.

**Orange Flare**—All-America 1935. Early flowering. Vivid orange blooms, 2 to 3-ft. plants.

**Orange Ruffles** — Semi-double, large, vivid blossoms. Very free blooming over long period, if old flowers are removed. 10 days earlier than Orange Flare. 3 to 4-ft. plants. Pkt. 15c.

**Sensation Mixed**—Largest, earliest. 4-ft. tall; flowers up to 5-in. across. All-America 1936.

**Yellow Flare**—All-America 1942. First yellow Cosmos ever developed. Single, 2 to 2½-in. flowers, produced in great masses on 3-ft. plants. Slightly later than Orange Flare. Pkt. 15c.

**CYNOGLOSSUM (Chinese Forget-Me-Not) (a)**—**Culture II.** Cover seeds  $\frac{1}{8}$ -in.

**Firmament** — New dwarf type, with bushy plants and bright blue color. All-America 1939. Pkt. 15c.

**DAHLIA (a)**—**Culture I.** Cover seeds  $\frac{1}{4}$ -in. Usually grown from roots, but interesting to raise from seed.

**Unwin's Ideal Bedding** — Miniature double and semi-double colorful flowers; dwarf bushy 18 to 24-in. plants. Long-lasting cut flower. Pkt. 15c.

**DAISY, AFRICAN**—See Arctotis.

### DELPHINIUM (hp) ♦

**Culture VII.** Cover  $\frac{1}{8}$ -in.

**Giant Pacific Hybrids** — Very large, well-shaped florets, tall, slender spikes. Pkt. 50c.

**Wrexham Hybrids** — Hollyhock-flowered strain. Pkt. 35c.

### DIANTHUS (Pinks) (a)

**Culture IV.** Cover  $\frac{1}{8}$ -in. Ht. 6 to 12-in. Blooms all summer.

**Single Mixed**—

**Double Mixed**—

**DIDISCUS**—See Blue Lace.

**DIGITALIS**—See Foxglove.

**ESCHSCHOLTZIA (California Poppy) (a) ♦**—**Culture III.** Cover  $\frac{1}{8}$ -in. Ht. 1-ft. Midsummer to frost. Prefers sun. Large, silky flowers, red, gold, orange, scarlet, chestnut, pink. Lacy foliage.

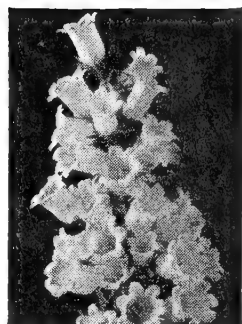
**EUPHORBIA** — See Snow-on-the-Mountain.

### EVERLASTING FLOWER (a)

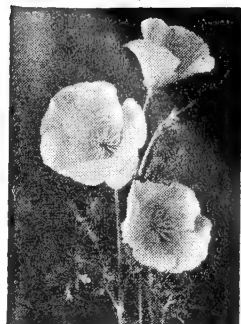
(Globe Amaranth, Gomphrena Everlasting or Clover Strawflower)—**Culture II.** Cover  $\frac{1}{8}$ -in. Ht. various. Blooms all summer. Retains natural colors when cut in bud and dried. A true Bachelor's Button that may be dried.

**Strawflower (Helichrysum)** — Large double flowers. Assorted.

**FOUR O'CLOCK (a) ♦**—**Culture III.** Cover  $\frac{1}{4}$ -in. Ht. 2-ft. Thrives under



*CAMPANULA*



*ESCHSCHOLTZIA*

any conditions. Sweet scented. Red, yellow, rose, white, lilac blossoms open in mid-afternoon.

**FOXGLOVE (Digitalis) (b) ♦**—**Culture VII.** Cover seeds  $\frac{1}{16}$ -in. Height 3 to 7-ft. Hardy Biennials for tall borders. Tall spikes of bell-shaped blossoms. All colors.

### GAILLARDIA (a) (Blanket Flower)

**ANNUALS:** **Culture II.** Cover  $\frac{1}{8}$ -in. Ht. 1½-ft. Blooms all summer. Needs full sunshine.

**Single Mixed**—

**Double Mixed**—

### GAILLARDIA (hp)

**PERENNIALS:** **Culture VII.** Cover  $\frac{1}{8}$ -in. Ht. 2-ft. Showy blooms in orange, yellow, red and maroon. Withstands drought, heat.

**Perennial Monarch Mixed** — Large range of colors.

**GEUM (hp)**—**Culture VII.** Cover  $\frac{1}{8}$ -in. Ht. 2-ft. Flowers like tiny double roses, long stems, prized for cutting. Pkt. 15c.

**GILLIFLOWER**—See Stocks.

**GLOBE AMARANTH**—See Everlasting Flowers.

**GODETIA (Satin Flowers) (a) ♦** — **Culture II.** Cover  $\frac{1}{8}$ -in. Ht. 1-ft. Bushy plants with masses of Azalea-like flowers. Thrives best in moist soil and half-shade.

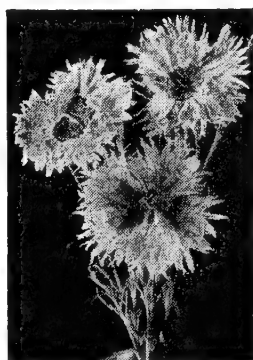
**Double Mixed**—Long spikes with pom-pom-like blossoms.

**GOURDS, ORNAMENTAL (a)** **Culture II.** Cover seeds  $\frac{1}{2}$ -in. Useful climbers, large foliage; singularly shaped. Last years when fully ripened and cured. **Mixed.**

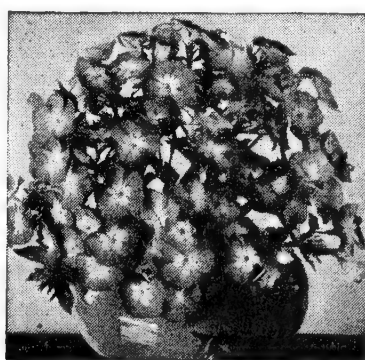
### GYPSOPHILA (a) (Baby's Breath)

**ANNUALS:** **Culture II.** Cover  $\frac{1}{8}$ -in. Ht. 1½-ft. Blooms 6 to 7 weeks. Sow two weeks apart for continuous bloom.

**White**—A pure strain.



*DIANTHUS  
Single*



*PHLOX, Rosy Morn*



*DAHLIA UNWINS  
Dwarf Hybrids*



A vegetable garden only 25 x 50 feet will keep a hungry family of five in fresh vegetables all through the season — with plenty left over for canning.

HOTBED OR COLD FRAME

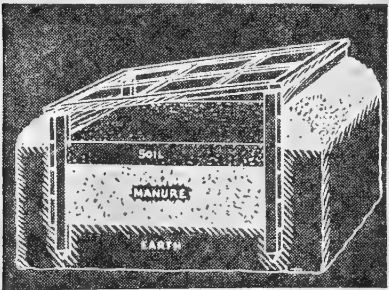
Normally, these do not pay if used only for growing seedlings, but the advanced gardener will find them useful for protecting plants in fall, for storing winter vegetables or for growing lettuce and radishes until long after they are available in the open garden.

These should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day.

**TYPES:** Hotbeds can be heated with fresh manure, leaves, electric cables, electric bulbs or through a basement window.

Standard hotbed sash is three feet wide and six feet long, so if sash is purchased, make hotbed of these dimensions. Many gardeners use a storm window after the worst cold of winter is over. Frame should be sloped by making north side six to eight inches taller than south side to catch sunlight and to provide good drainage.

Dig hole six inches larger on all sides than the frame on which sash rests.



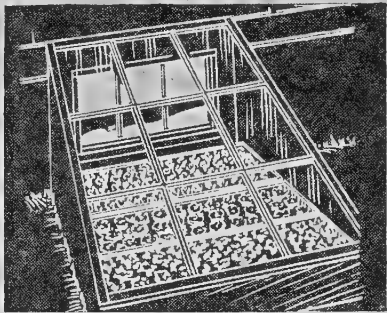
Pit should be 24" deep. Fill to top with fresh strawy horse manure and press down six inches. Set frame over manure and fill around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat.

If manure is not available, dried leaves or chopped straw may be used by adding a handful of ammonium nitrate or ammonium sulfate to each bushel of leaves. This will not, however generate as high a heat as manure.

As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees. This is time to plant tomatoes and peppers. For cabbage, cauli-

flower, broccoli and kohlrabi, allow thermometer to go below 75 degrees.

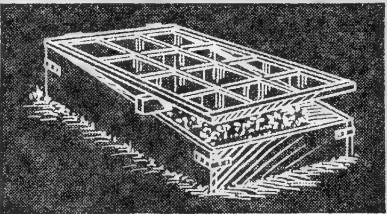
On sunny days ventilate thoroughly, but even on cloudy days a crack of air may be needed to get rid of ammonia odor. Cover glass at night with blankets, old rugs or hotbed mats to conserve heat.



Basement Window Greenhouse

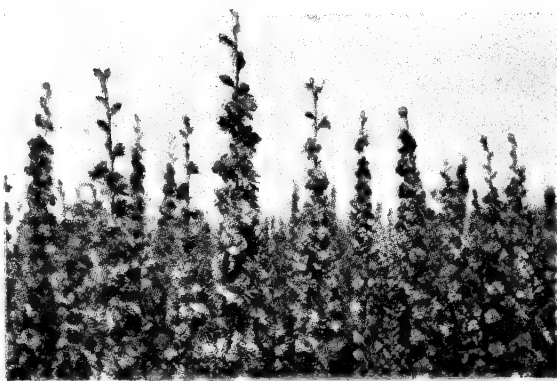
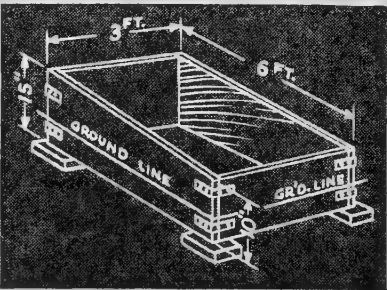
The frame for a basement window greenhouse is made the same as for a manure hotbed, but the back is omitted and no pit is dug. The open back fits against the basement window. The open window both ventilates and heats, so that in most instances no further ventilation will be needed. On very cold nights, a 100 watt electric bulb will keep up heat.

Electric hotbed cables are usually installed over a bed of sand six inches thick, and covered with 1/2" mesh hardware cloth. Electric lights (two 100 watt lamps for each 3 x 6 sash) can be used and controlled by a chicken brooder thermostat.

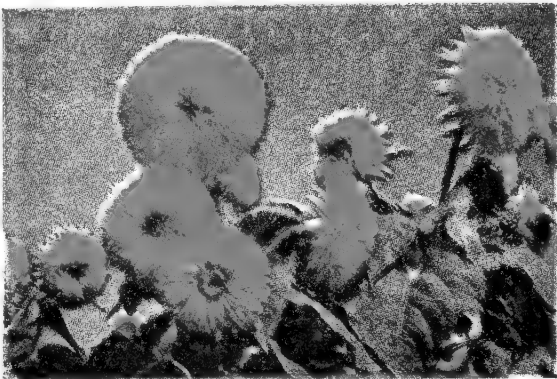


Cold Frames

A cold frame is the same as a hotbed without manure or other source of artificial heat. It depends upon the sun for heat, and must be covered with hotbed mats to conserve this heat at night. It can be used only after the weather has warmed up somewhat, but before the danger from late frosts is past. Lettuce and radishes planted in the cold frame a month before frost is expected can be grown until late in the year if the glass is kept covered at night.



LARKSPUR, Giant Imperial Lilac King



HELIANTHUS, Sun Gold



ZINNIA, Dahlia-Flowered Exquisite



MARIGOLD, Sunkist



## GYPSOPHILA (hp)

**PERENNIALS:** Culture VII. Cover  $\frac{1}{8}$ -in.

**Perennial White**—Tiny flowers on slender stems, producing a mist-like effect.

**HELIANTHUS (Sunflower) (a)**—Culture II. Cover  $\frac{1}{4}$ -in.

**Sun Gold**—New! Huge 100% double flowers, free blooming, 4 to 5-ft. tall. Pkt. 15c.

**HELICHRYSUM**—See Everlasting Flowers.

**HEUCHERA (Coral Bells) (hp)**—Bright coral red flowers on wiry stalks. Charming for low border or rock garden. Pkt. 15c.

## HOLLYHOCK (hp)

Culture VII. Cover seeds  $\frac{1}{4}$ -in. Ht. 5 to 8-ft. Succeed best in deep, rich, well-drained soil. Like warm, sunny place. Double Mixed—

**KOCHIA (Burning Bush or Fire Bush) (a)**—Culture II. Cover  $\frac{1}{8}$ -in. Ht. 3-ft. Close, compact, bright green pyramidal bush, moss-like foliage that turns brilliant red in fall. Fine hedge plant.

**LADY SLIPPER**—See Balsam.

## LARKSPUR (a)

Culture IV. Cover  $\frac{1}{8}$ -in. Ht. 2 to 4-ft. Blooms all summer. Clustered flowers on tall spikes, feathery foliage. Keep faded blooms cut.

**Blue Spire, Giant Imperial**—Most desirable blue. Pkt. 15c.

**White King, Giant Imperial**—Large, double, pure white. Pkt. 15c.



GAILLARDIA

NICOTIANA

**Giant Imperial Mixed**—Pkt. 15c.

**Pink Perfection**—2-in. florets, cutting spike 24-in. or more. Early flowering. Pkt. 15c.

**LINUM (a) ANNUALS:** Culture III. Cover  $\frac{1}{8}$ -in. Ht. 15-in. Need sun.

**Scarlet Flax**—Brilliant glossy-red flowers on delicate stems. Life of individual flower short, but blooming season can be prolonged by successive sowings.

**LINUM (hp) ♦**—PERENNIAL: Culture VII. Cover  $\frac{1}{8}$ -in. Need sun. Ht. 15-in.

**Perennial Blue**—Light blue, upright flowers in great profusion all summer.

**LOBELIA, Crystal Palace (a)**—Culture V. Cover  $\frac{1}{16}$ -in. Ht. 4-in. Small, round, compact plants covered with deep blue flowers, dark foliage.

**LUPINES (a) ♦**—Culture III. Cover seeds  $\frac{1}{2}$ -in. Midsummer. Prefers light shade. Long spikes of large dark blue, sky blue, rose, or white flowers. Mixed.

## LUPINS (hp)

**Russell's Choice Mixed**—Wonderful border flower of many lovely colors. Gold Medal winner, 1937. Pkt. 25c.

## MARIGOLD (a)

Culture II. Cover  $\frac{1}{8}$ -in. Ht. various. Blooms early and late.

**Burpee's Gold**—Extremely large, sweet-scented, double. Odorless foliage. 2½-ft. Pkt. 15c.

**Butterball, Dwarf French Double**—All-America 1942. Compact, 6 to 10-in. plants; very early. 1½-in. blooms. Pkt. 15c.

**Crown of Gold, Odorless**—All-America 1937. Short, quilled center petals, with flat, deep orange guard petals. Branching plant, 2½ to 3-ft. Midseason.

**Dwarf Royal Scot**—Mahogany red flowers with gold stripes. Plants, 24 to 30-in. Pkt. 15c.

**Guinea Gold**—Magnificent golden flowers with carnation-like petals. Plants 2 to 2½-ft.

**Harmony Type, French Dwarf Double Hybrids**—Flowers 1¾-in., all double. No strong Marigold odor. Plants 12 to 14-in. Combinations of yellow, orange, blotched and striped combinations of orange or yellow with maroon. Earliest of all. Pkt. 15c.

**Harmony Type, French Tall Single, Ferdinand**—A tall French Marigold with brown rays and golden tufts. Pkt. 15c.

**Spry**—1941 All-America. Extra dwarf double French type; about 9-in. tall; 1½-in. flowers, clear yellow crested center, mahogany-red guard petals. Blooms in 9 weeks. Pkt. 15c.

**Sunkist**—1943 All-America. Dwarf, compact, very early. Continuous blooming, 6 to 10-in. mound-shaped plants. Flowers to 1½-in. across. Pkt. 25c.

**Yellow Supreme**—Sweet-scented, yellow, 3-in. blossoms.

**Yellowstone, Mission Giant**—All-America 1942. Late blooming. Pkt. 20c.

**MIGNONETTE, Sweet Scented (a)**—Culture I. Cover  $\frac{1}{16}$ -in. Ht. 15-in. Dwarf, with many small spikes of fragrant blossoms. Long blooming.

**MOON FLOWER (a)**—Culture VIII. Cover seeds  $\frac{1}{4}$ -in. Plant in a sunny location. Quick-growing vine with dense green foliage and pure white flowers, 5 to 6-in. across, that open in evening and on cloudy days. Fragrant.

## MORNING GLORY (a)

(Ipomoea)

Culture III. Cover  $\frac{1}{4}$ -in.

**Heavenly Blue**—Vigorous, quick growing, with extremely large blue flowers. Long blooming. Pkt. 15c.

**Scarlett O'Hara**—All-America 1939. Rich wine-red or deep rosy crimson blossoms about 4-in. across. Pkt. 15c.

**Pearly Gates**—1942 All-America. Unusually large white flowers, luxurious foliage. Plant with Heavenly Blue and Scarlett O'Hara for red, white and blue effect. Pkt. 15c.

**Tall Mixed**—A very large-flowered strain with many lovely colors.

**MOSS ROSE**—See Portulaca.

**MOURNING BRIDE**—See Scabiosa.

## NASTURTIUM (a)

Culture III. Cover  $\frac{1}{2}$ -in. Prefers sunny location. Thrives in poor soil.

**Dbl. Glorious Gleam Hybrids**—Sweet scented. Long stems. Compact habit. Many colors.

**Golden Gleam**—Double and semi-double fragrant gold blossoms, semi-tall plants.

**Golden Globe (Dwarf Dbl.)**—Color like Golden Gleam. Dwarf.

**Scarlet Gleam**—Fiery red.

**Single Tall or Climbing**—May be used for covering fences or trailing over rockwork. A wide range of colors.

**NEMOPHILA (Baby Blue Eyes) (a)**—Culture II. Ht. 6-in. Dwarf, spreading plants; sky blue flowers, lighter toward center.

**NICOTIANA (a) ♦**—Culture I. Cover  $\frac{1}{16}$ -in. Ht. 2½ to 3-ft. Long tubed, petunia-like blossoms pour rich, spicy fragrance over the garden morning and evening.

**PANSY (a) ♦**—Culture VII. Cover  $\frac{1}{8}$ -in. Ht. 6-in.

**Swiss Giants**—Long-stemmed, especially for cutting. Pkt. 50c.

## PETUNIA (a)

Culture I. Cover  $\frac{1}{16}$ -in. Ht. various. Blooms summer and fall.

**Burgundy**—A rich wine red with contrasting white throat. Single plain edged.

**Dainty Lady**—All-America 1936. Large, single fringed, yellow, ringed gold and cream; compact plants. Pkt. 35c.

**Flaming Velvet**—Dark red, single, plain edged. Pkt. 15c.

**Fluffy Ruffles**—A delightful mixture of delicate light shades. Finely fringed and very heavily ruffled so that they appear double. Finest choice for home gardens.

**Giants of California, Mixed**—A well balanced mixture of large fringed and ruffled flowers of light and dark shades. Suitable for window box or potting.

**Glamour**—1942 All-America. Huge 5 to 6-in. blooms; appear when plant only 5 to 6-in. tall. First appear double, but as they mature, petals fall back, exposing throat. Plants 1½ to 2-ft. Pkt. 25c.

**Rose of Heaven**—Rose, with inconspicuous light throat. Single flowers. dwarf plants.

**Rosy Morn**—Medium sized rose-pink flowers, white throat. Plants, 1-ft. Pkt. 15c.

**Single Fringed, Mixed**—Excellent mixture of rich bright colors. Medium size and erect growing.

**Single, Plain Edged, Mixed**—Special mixture, light and dark shades.

**Single, Plain Edged, White**—Pure white, dwarf, compact.

**Theodosia**—Flowers 3 to 3½-in., rose, with gold throat; single fringed. Flowers when plant very small. Pkt. 25c.

*All Flower Seeds*  
**10c PER PACKET**  
except where otherwise noted



## PREPARING THE GARDEN SOIL

A good gardener can be told by the way he treats the soil. No gardener worthy of the name works it when it is so wet that it will pack. Abuse of the soil may ruin it for the entire season. Use the mud pie test already described before digging or plowing.

If your soil is heavy clay, lime added before plowing will help break it up. Even more valuable is decayed vegetable matter of some sort—peat moss, humus, old manure or leaf mould.

Do not apply fresh manure to green vegetation in spring because, as this decays, it will form a gas that will hurt roots.

If necessary to make a garden on sod, skin off the sod and add it to the compost heap. If the garden is fall-plowed, however, sod can be turned under and will decay fairly well if lime and fertilizer are applied at the same time.

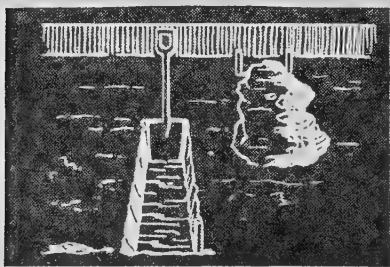
### To Dig or Plow

Many a gardener has wasted precious time waiting for a plowman to turn over a garden that could easily be turned over with a spade and would be in better condition than if packed by a heavy tractor. Hand digging, if properly done, is better for a garden than tractor plowing. Larger areas, of course, must be worked by machinery, but if possible, do the final finishing by hand.

The trick of hand spading is to take your time. A good sized garden can be turned over in about a week by working at it an hour a day. When you dig, don't cheat the spade. Drive it straight down, lift the entire clod and turn it completely upside down. Hit it with the back of a spade, and if the soil is in good condition it will crumble.



To be sure that each clod is actually turned over, remove a trench along the beginning of the garden just one spade wide. Then as each spadeful is lifted, turn it over into this trench.



**Vegetables? Of course! But this year plant plenty of flowers, too!**

The soil removed from the first row is wheeled around to where you plan to finish, and is used to fill the last trench or spit.

Trenching (the method used by these) does not pay for a temporary garden, but should be practiced by home owners who plan to work the same plot year after year. In this method a trench is dug two full spades deep.

Manure or compost is spread over the top of the entire garden and also at the bottom of each trench as dug. The second row of soil is thrown into the bottom of the trench and the layer just below it is thrown on top of it. In this way the entire garden is turned upside down and the ground is loose and friable to a depth of nearly two feet.

Because considerable subsoil is mixed with the upper layer, an extra application of fertilizer to the garden after digging is good practice.

From the second year on, the soil should get better and better, even though it is only turned over one spade deep each year.

### How Much Fertilizer? What Kind?

Well rotted manure and compost are important to the production of good crops and they do feed plants, but it must be remembered that they do not contain the type of nitrogen that is needed early in the season.

If 30 lbs. of a good mixed fertilizer are applied to every 1,000 feet of garden before digging, and an equal amount applied between the rows about half-way through the season, all of the plant food needs of the average garden can be met.

Always "water in" the summer application to prevent burning.

### PLANTING THE SEED

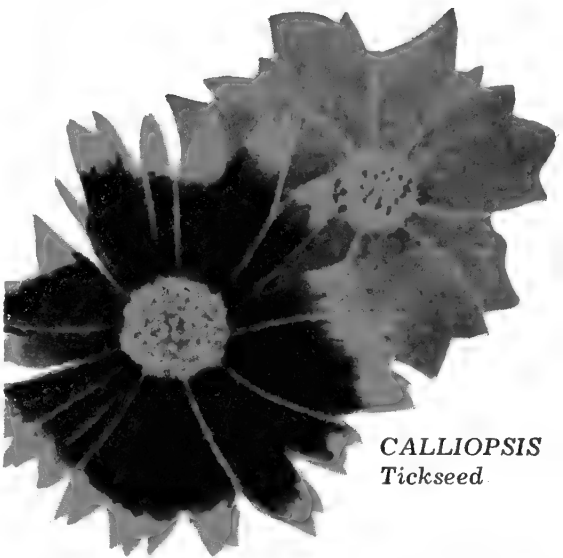
Don't try to make rows without a line or straight edge. Place a stake at each end of the row and stretch a line tightly between them. Make the furrow for the seed with a hoe.

The old theory that seed should be planted deep enough to come in contact with soil moisture still holds, but in dry weather the soil should be watered thoroughly before planting so the moisture will be right at the surface. If the row is then covered with a board until the seed germinates, it will not be necessary to bury the seed even though the weather is dry.

Fine seed (onion, lettuce, cabbage, etc.) should not be planted more than  $\frac{1}{2}$ " deep. Medium seeds (okra, spinach, cucumber) 1" deep. In heavy soils, beans, squash, onion sets and peas need not be covered more than 1" but the soil must be moist. In lighter soils, 2" is deep enough.



STRAWFLOWER, *Everlasting*



CALLIOPSIS  
*Tickseed*



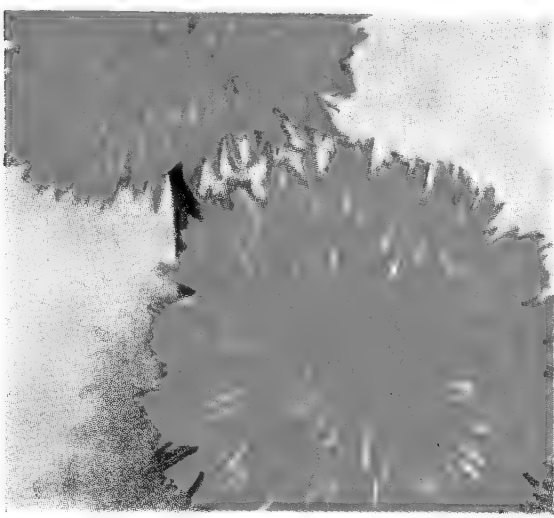
GODETIA, *Mixed*



ZINNIA  
*Harmony Type*

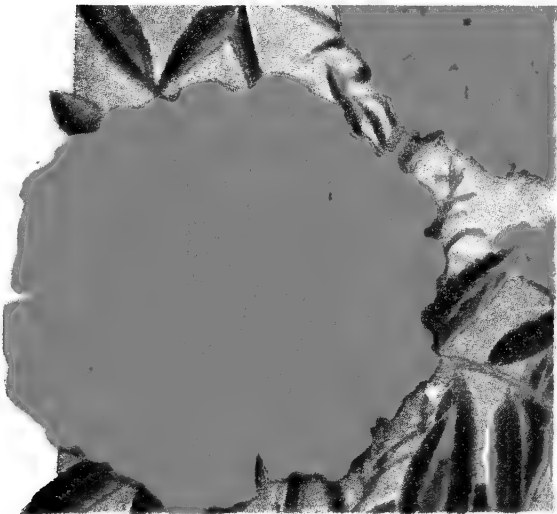
# GARDEN GUIDE POSTS

HOW?  
WHEN?  
WHERE?  
WHY?



CALENDULA, Orange Shaggy

MARIGOLD, Harmony  
Type, French  
Tall Single



MARIGOLD, Guinea Gold

(Below) GAILLARDIA



## SEED PLANTING (Cont'd)

One of the common errors in planting squash, melon, cucumber, etc., is to assume that a hill really is a hill. Actually, a hill is a hole, since these vine crops are planted in depressions about 2" below the surrounding surface to catch water. Incidentally, all vine crops love humus or well-rotted manure. If they can be planted in depressions filled with soil in the top of a compost heap, they will produce extravagantly.

Good seed germinates freely, so it is a mistake to plant it too thickly. This is especially true if it is treated before planting with ROOTONE, which speeds up germination and root growth.

### How to plant fine seed

In planting fine seed, tear off one corner of the packet and, if Rootone is used, drop in a pinch and shake. The seed can be tapped out of the torn corner of the packet one at a time. Fine seed is often mixed with dry sand so that it will spread out better, but this will only work if seed is not more than twice the size of the sand grains.

Large seeds should be poured out of the packet into a cup or bowl so that they can be dropped individually into the furrow. Beans and peas should be treated with a legume inoculation before planting, even if this was done last year. Improved legume cultures are constantly being propagated in the laboratories and give superior results to natural inoculation.

## TIME OF SOWING

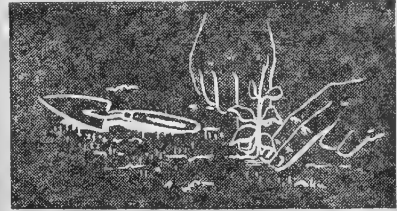
The danger from frost or cold and wet weather varies so much that exact dates are impossible to give. However, the following natural calendar will tell when various crops are to be planted.

**FULLY HARDY CROPS:** Sow as soon as the ground can be worked in spring, or when the farmer plants oats. In some years crocuses and snowdrops may be in bloom at this time, but if the ground is ready sooner, plant anyway. These crops include lettuce, cabbage, broccoli, carrots, cauliflower, kale, kohlrabi, parsnips, radishes, rutabagas, spinach and turnips. Also round-seeded peas.

**HARDY CROPS:** When the daffodils and earliest tulips bloom, or when maple trees are in full flower, plant these: Beets, wrinkled peas, Swiss chard, and onion sets.

**TENDER CROPS:** When the Lilacs, Darwin Tulips and Apple Blossoms are in full bloom, plant these: Bush beans, sweet corn, pumpkins, and squash are included.

**TROPICAL CROPS:** When the petals on apple blossoms will have fallen and the tall late irises are in full bloom plant: Okra, Lima beans, Pole beans, muskmelons and cucumbers, and set out plants of tomatoes, peppers and eggplant. These can't stand frost and should not be planted until the weather is warm and settled.



## TRANSPLANTING

Seedlings can be transplanted any time after the second pair of leaves has formed, provided the weather is suitable.

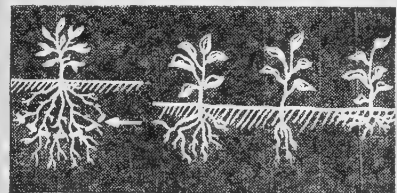
The effects of "hardening off" seedlings by exposing them to cool air is not very effective; even a fully hardened cabbage plant will lose its frost resistance if subjected to warm weather for four or five days. Therefore, even in the case of crops that are seeded very early, seedling plants should not be set outdoors until the weather is warm and settled.

Cabbage, broccoli and cauliflower can go out when sweet corn is planted, and tomatoes and peppers after apple blossom petals fall.

Wet the soil around seedlings thoroughly before planting out. Select a cloudy day so the direct sun won't wilt the plants. Dig with a ball of soil that contains as many fine hair roots as possible.

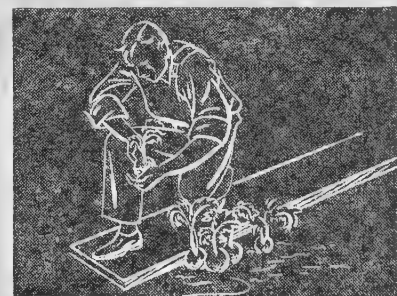
Watering the seedlings with a solution of TRANSPLANTONE when transplanting will restore the hormones lost when the root tips are cut in digging. This plant hormone prevents wilting and means quicker recovery from the shock of transplanting.

In working between rows when transplanting, lay a board over the soil so it won't pack. Roots grow better in loose soil.



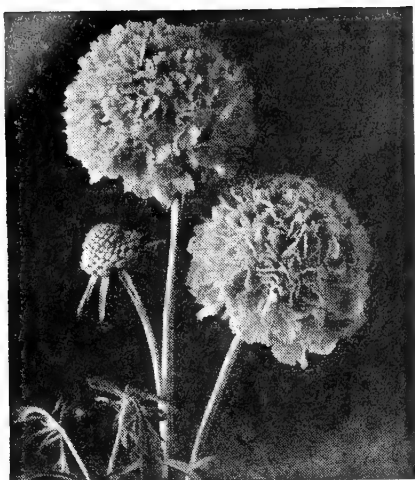
Right Wrong Wrong

When seedlings are to be transplanted without a ball of soil, long tap roots should be shortened, and the whole root system placed and "firmed in" so that it is well spread out, not bunched. Soil in which roots are placed must be finely pulverized.



Use a wide board when transplanting, to prevent packing soil around roots. (See sketch.)





SCABIOSA, Blue Moon

### PHLOX (a) ♦

**Culture II.** Cover  $\frac{1}{8}$ -in. Ht. various. Prefers sun. Thrives in almost any soil. **Art Shades**—A wonderful range of soft shades. Light and deep salmon with cream eye, pale violet and soft rose with white eye. A beautiful assortment.

**Rosy Morn**—A bright color combination of deep rose pink with a white eye. A free bloomer.

**Salmon Glory**—A deep salmon with cream eye.

### POPPY (a)

**ANNUALS:** Cover  $\frac{1}{8}$ -in. Ht. various. Grow freely in almost any soil. Prefer sun.

**California**—See Eschscholtzia.

**Iceland Mixed (hp)**—Culture VII. Blooms first year. Excellent color balance. Immense blooms and very long stems.  $2\frac{1}{2}$  to 3-ft. Pkt. 15c.

**Shirley Mixed**—Ruffled edges, large blooms.

**PORTULACA (Moss Rose) (a)**—Culture III. Cover  $\frac{1}{8}$ -in. Ht. 5-in. Thrive in sunny location and light soil. Fine for mass planting, edgings.

**Double Mixed**—Pkt. 15c.

**Single Mixed**—

**POT MARIGOLD**—See Calendula.

**RICINUS**—See Castor Bean.

**SALPIGLOSSIS (Painted Tongue) (a)**—Culture II. Cover  $\frac{1}{16}$ -in. Ht.  $2\frac{1}{2}$ -ft. Blooms midsummer to frost. Large, lily-like flowers, velvet textured, in many bright colors.

**SALVIA (Flowering Sage) (hp)**—Lavender-blue flowers on plants about 3-ft. high. This perennial will bloom first year if planted in spring and lasts until the first frost. Pkt. 15c.

**SATIN FLOWER**—See Godetia.

### SCABIOSA (a)

(Mourning Bride)

**Culture II.** Cover  $\frac{1}{8}$ -in. Ht.  $2\frac{1}{2}$ -ft. Early summer to frost.

**Blue Moon, Imperial Giants**—Double flowers, resembling old-fashioned beehive. Lavender blue. All-America 1939. Pkt. 25c.

**Rosette**—Very large; rose, flushed with salmon. Pkt. 15c.

**Mixed**—

**SCARLET FLAX**—See Linum.

**SCHIZANTHUS (Butterfly-flower or Poor-Man's Orchid) (a)**—Culture II. Cover  $\frac{1}{8}$ -in. Ht. 2-ft. Flowers like tiny butterflies in pastel shades, with dainty markings. Finely lacinated foliage.

**SHASTA DAISY, Alaska (hp)**—Culture VII. Cover  $\frac{1}{8}$ -in. Ht. 2-ft. White single blossoms, 4 to 5-in. across, with small yellow centers, long stems.

**SNOW-ON-THE-MOUNTAIN (Euphorbia) (a)**—Culture IV. Cover  $\frac{1}{8}$ -in. Ht. 2-ft. Foliage beautifully edged with white. Prefers sun.

**STATICE (Sea Lavender) (a)**—Culture I. Cover  $\frac{1}{8}$ -in. Ht.  $1\frac{1}{2}$ -ft. Seed germinates very slowly. Masses of dainty flowers in large panicles, giving a mist-like effect. When dried, flowers last for months.

**STRAWFLOWER**—See Everlasting.

### STOCKS (a) ♦

**Culture I.** Cover  $\frac{1}{8}$ -in. Ht. 2 ft. Bloom all summer. Like well-enriched soil, plenty of moisture, some shade in hot months.

**Giant Imperial**—Large flowers, long stems. Very early; many doubles. Pkt. 25c.

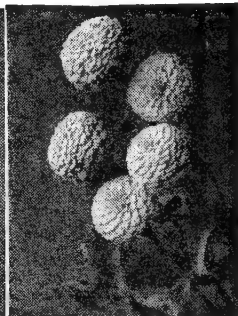
**Ten Week Stocks**—Double rosette-like blooms, fine stems.

**Beauty Mixed**—

**SUNFLOWER**—See Helianthus.



ZINNIA  
Scabious Flowered



ZINNIA  
Lilliput

### SWEET PEAS (a)

Sow very early. Dig trench 1-ft. wide and deep. Place 6-in. rotted manure or peat moss mixed with manure, on bottom, tread down firmly. Fill with good garden soil. Sow one row of Sweet Peas  $\frac{3}{4}$ -in. apart. When plants are 3 to 4-in. high, thin to 6-in. apart and provide supports. Need plenty of water; and mulch of peat moss when warm weather approaches. Pick flowers daily.

**Early Flowering Spencer**—Individual colors and mixed. Can be grown either inside or out of doors.

**Late or Summer Flowering Spencer**—Individual colors, mixed. Extremely hardy, productive, and more heat resistant than other varieties.

**Ruffled Spencer**—Individual colors, mixed. Contains many varieties in a perfect blend of color.

**TICKSEED**—See Calliopsis.

**TITHONIA, Fireball (a)**—Culture I. Cover  $\frac{1}{8}$ -in. Ht. 6 to 8-ft. Blooms in late summer. Dazzling scarlet, large single flowers. Plant very tall.

**TRITOMA (Red Hot Poker) (hp)**—Striking red spires of bloom from August on. About 3 ft. tall. Continuous blooming. Newly popular.

### VERBENA (a)

**Culture I.** Cover seeds  $\frac{1}{8}$ -in. Ht. 15-in. Dwarf plants with very large heads.

**Mammoth White**—

**Scarlet**—

**Shades of Blue**—

**Mixed**—

**WILD FLOWER MIXTURE**—Splendid mixture of old fashioned garden flowers, various kinds and colors, for interesting border planting.

### ZINNIA (a)

**Culture III.** Cover  $\frac{1}{8}$ -in.

**Black Ruby**—1941 All-America. Deep velvety maroon. Lilliput or Pompon zinnia of merit. Distinct color for this class;  $1\frac{1}{4}$  in. flowers, long stems. Plants 18 in. tall. Effective used with lighter colors. Pkt. 15c.

**Crown of Gold**—Giant flowers, petals deep golden yellow at base, with individual colors at tip. Plants 2-ft. Pkt. 15c.

**Dahlia Flowered**—6-in. blooms. Plants  $2\frac{1}{2}$  to 3-ft. Most satisfactory Zinnia. Yellow, red, pink, orange. Pkt. 15c.

**Fantasy**—Great masses of shaggy ray-like twisted petals; 2-ft. plants. **Melody** (orchid-lavender), pkt. 15c; **Star Dust** (clear golden yellow), pkt. 15c; **Wild-fire** (rich scarlet), pkt. 20c; **White Light** (pure white), pkt. 15c; **Mixed**, pkt. 10c.

**Giants of California**—Huge blossoms, on 3-ft. plants. Variety of colors. **Mixed**.

**Harmony Type, Mixed**—Plants 3 ft. bearing numerous medium sized flowers. Fine mixture contains bright shades such as crimson, orange, yellow, pink and white.

**Lilliput**—Straight-stemmed midget pompons. Red, yellow, pink, white, orange and mixed.

**Lilliput Pastel Mixture**—Plants 12 to 18-in. Pompons 1 to  $1\frac{1}{2}$ -in. Variegated pastel colors.

**Linearis**—Single, golden-orange flowers, lemon yellow stripe, brown centers. Dwarf 1-ft. plants. Pkt. 15c.

**Mexicana**—Miniature yellow, orange and mahogany flowers, frequently variegated. Single and double, on 1-ft. plants.

**Navajo Mixed**—Bi-colored. Medium sized flowers;  $2\frac{1}{2}$  to 3-ft. plants. All-America 1938. Pkt. 15c.

**Pumila Sunshine Tints**—Symmetrical  $2\frac{1}{2}$  to 3-in. flowers, in luscious autumn tints and pastel shades. Very free flowering. Long stems, fine for cutting. Pkt. 15c.

**Scabious Flowered**—Large semi-globular crown, surrounded by fringe of petals. Plants  $2\frac{1}{2}$  to 3-ft. Pkt. 15c.

**Super Crown-O'Gold, Pastel Tints**—Flowers 5 to  $5\frac{1}{2}$ -in. Wide range of pastel shades. Pkt. 25c.

**Will Rogers**—A striking new red, never before available in Zinnias. Very robust plants, literally loaded with mammoth blooms, 6 inches across, and often 4 inches in depth, resembling the Show Dahlia.

*All Flower Seeds*  
**10c PER PACKET**  
except where otherwise noted

# Planting Guide... FOR THE FLOWER GARDEN

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column is as follows:

- A—For dry, hot locations.

B—For a succession of blooms.

C—For shady locations.

D—For poor soil.

E—For edging.

F—For the rock garden.
- G—For their foliage.

H—Everlasting for winter bouquets.

I—For their fragrance.

J—For porch or window boxes.

K—Climbing vines.

L—For backgrounds.

	Height (inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	EFJ	5-10	10 Wks.	bushy
Alyssum	2-12	BCDEFIJ	5-10	6 Wks.	spreading
Antirrhinum	12-60	CIL	20-25	3-4 Mos.	bushy
Aquilegia	18-36	CEF	15	3 Mos.	branchy
Balsam	14-20	AE	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Campanula	18-24	F	8-15	10-12 Wks.	bushy
Candytuft	6-18	BFI	5-10	8-10 Wks.	bushy
Centaurea	18-36	ABCDEIJ	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	AE	5-20	8-10 Wks.	bushy
Celosia	12-36	DEH	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	ABD	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Digitalis	30-48	F	10-20	3-4 Mos.	erect
Dianthus	4-15	FI	5-10	12 Wks.	bushy
Eschscholtzia	10-12	CDF	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	AD	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy

Godetia	12-24	CD	15-20	2 Mos.	erect
Gypsophila	18-36	BH	15-20	8-10 Wks.	branching
Helichrysium	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Kochia	30-36	AB	15-18	Foliage	bushy
Larkspur, (A)	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	IK	25-40	2-3 Mos.	vine
Lobelia	4-8	EJ	10	10-12 Wks.	bushy
Marigold	8-36	BJ	5-8	6-8 Wks.	bushy
Mignonette	10-12	BI		3-4 Mos.	erect
Moon Flower	12 ft. plus	IK	5-8	4-5 Mos.	vine
Morning Glory	12 ft. plus	AK	5-8	3-4 Mos.	vine
Nasturtium	12-36	DEFK	8-15	2-3 Mos.	bush.vine
Nigella	10-18	BF	10-15	10-12 Wks.	bushy
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	CEF	10-15	10-12 Wks.	clump
Petunia	10-24	DEFJ	18-20	10-12 Wks.	bushy
Phlox	10-18	ABCFIJ	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	ADEFJ	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30		18-20	2-3 Mos.	bushy
Stocks	12-24		5-15	12-14 Wks.	bushy
Schizanthus	18-36	CE	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 Wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	EFJ	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	AF	5-10	6-8 Wks.	bushy

## The 8 CULTURES... SEE CULTURE NUMBERS IN OUR FLOWER LISTING

### CULTURE I

Seeds give best returns if sown in flats in early spring, but good results may be obtained by sowing outdoors after all danger of frost is past. Sow seed at depth indicated under flower descriptions. Water thoroughly with fine spray and place in warm room; watch flats carefully and never let soil become dry. When seedlings appear, remove flats to sunny window. Transplant to other flats as soon as they are large enough to handle, keeping them 2" to 2½" apart both ways. Expose gradually to outside conditions and, when sufficient growth has been made, plant in permanent outside locations. For sowing outdoors, follow instructions given in Culture II.

### CULTURE II

May be sown in outside seed-beds and later transplanted, or directly into their permanent location. Spade seed-bed deeply, mix well-rotted manure, or peat moss or humus and a commercial fertilizer, well into the soil; spread an additional half inch of peat moss or humus on seed-bed, and rake well into top surface. Sow seeds at depth indicated, and water thoroughly with a fine spray. When large enough, transplant or thin out. If exceptionally early flowering is desired, follow instructions under Culture I.

### CULTURE III

Seeds do not take kindly to transplanting and should be sown outdoors, as soon as danger of frost is over, in beds they are to occupy. Prepare seed-bed same as Culture II. Level off and sow seeds thinly at depth indicated; water thoroughly with a fine spray. After seedlings appear, thin out.

### CULTURE IV

Seeds under this culture, being quite hardy, may be sown outside in very early spring, as frosts do not affect their growth to any extent. The seed-bed should be spaded deeply, and fertilizer mixed thoroughly with the subsoil. Plant at depth indicated, and water thoroughly with a fine spray. When large enough to handle, thin out and transplant. For very early plants, sow in fall, leaving plants to winter in their beds.

### CULTURE V

Sow in flats in early spring if for the garden; or during the summer if you wish to cultivate them in pots for house decoration. Sow seeds to depth indicated, and water thoroughly with a fine spray. Place in a warm room. As soon as seedlings appear, remove to a sunny window. When large enough to handle, transplant into other flats to stand 2" apart in rows. Transplant outdoors when all danger of frost is past. If for house decoration place in larger pots.

### CULTURE VI

Plants are purely conservatory or hot-house plants. Follow instructions for preparation of seed-flat above and sow seeds preferably during spring months at depth indicated. Water thoroughly with a fine spray, and place in warm room. As soon as seedlings appear, remove to sunny window. When large enough to handle, transplant into other flats to stand 2" apart. Later pot up in 2" or 2½" pots and change to larger pots as often as needed.

### CULTURE VII

May be sown in early summer in flats or coldframes at the depth indicated. Water thoroughly with a fine spray. Place in a

warm room and as soon as seedlings appear, remove to a sunny window. When large enough to handle, transplant into other flats, spacing seedlings 2" to 2½" either way. Later, when they begin to crowd, transplant them a second time. In fall, if well developed, they may be placed in their permanent locations where they are to blossom the following year, or left in the seed-beds for early spring transplanting. **Note:** Only a few varieties under this culture will produce flowers the first year, and all will benefit by winter mulch or protection at least the first season. Seed may be sown in the open, after danger of frost is past, in a seed-bed in which the top soil is finely pulverized and mixed with peat moss or humus. Raise seed-bed several inches above the rest of the garden to prevent seeds being washed out. When plants are sufficiently large, place them in their permanent locations.

### CULTURE VIII

Best sown indoors in early spring directly into small pots. Fill the pots with a mixture of good garden soil, composed of two parts soil and one part humus, to within a half inch of the edge of the pot. Firm the soil and place one or two seeds at the depth indicated. Take an ordinary seed-flat, fill with moist peat moss, and plunge the pots into this up to within a half inch of the edge. Water pots thoroughly. Place in a warm room and as soon as seedlings appear, remove to a sunny window, gradually exposing them to outside conditions. When all danger of frost is over remove from pots without destroying the root-ball and plant in their respective places outdoors. If advanced blooming is not desired, seeds may be sown outside as soon as warm weather sets in.



## WATERING

Except for transplants, try to avoid watering the garden until it really needs water. When you do water, soak, don't sprinkle. Do a thorough job. The hose or sprinkler should be allowed to run on one spot until water stands on the surface in a pool.

After watering, the soil should be moist to a depth of five to six inches. Check this with a spade to be sure.

Watering tomatoes calls for special care. Cracks and blossom "end rot" (the free or blossom end turning black) are both caused by fluctuating water supply. Never let tomatoes be dry one week and wet the next. Tomatoes must be kept either moist constantly or be grown in dry soil and not watered at all.



Never apply water with such force that the top soil is washed away. Use a canvas hose which allows water to ooze out through the pores, or remove the nozzle of the regular hose and let the stream run out on a board. Overhead sprinklers waste some water, but do prevent washing. Watering in the evening or early morning means that the moisture sinks in and is absorbed by the soil before the sun can evaporate it.

## CULTIVATION AND WEEDING

1. "Destroy them young" should be the first principle in controlling weeds. Weeds rob the soil of moisture and food. Worst of all, if allowed to grow, they shade the crops that require six hours of full sunshine to grow normally. Plan to spend half an hour a day hoeing weeds and the average garden can be kept up without difficulty.

2. Keep the soil from caking or cracking because when rain comes, it cannot penetrate the hard surface and may run off and be lost. A prong cultivator will leave the surface loose and ready to absorb rain.

3. Air is vital to plant growth: stir the soil as soon as the ground is dry enough after a rain or after watering. This also saves moisture. Use the hoe and save the hose.

4. When cultivating stay as far away from the plants as you can to avoid packing the soil around the roots.

## MULCHING

A mulch of straw, leaves or lawn clippings will keep the surface moist and conserve water. It reduces soil

temperatures and prevents root injury from heat. It will also keep tomatoes, pepper and eggplant clean and will prevent soil insects from attacking melons.

However, if summer rains are light, the mulch can do harm, because the few drops that do fall cannot penetrate to the soil. In this case, pull away the mulch from around the plant stem and soak the roots thoroughly with the hose.

A mulch is particularly beneficial to potatoes because tuber formation stops in hot soils. As much as 12" of straw can be used over potato roots.

## HARVESTING

The big advantage the home gardener has over the commercial grower is that he can pick his vegetables one minute and have them in the kitchen the next. All vegetables are better if left on the plant until ready to serve. Sweet corn in particular loses sweetness every minute it is off the stalk.

Pick only what vegetables you can use right away and not until you are ready to use them.

Most vegetables, particularly summer squash, sweet corn, cucumbers, carrots, beets, peas and string beans, should be used much younger than usually harvested by the commercial grower. Learn the "feel" of an ear of corn that is ready to pick. The tip of the ear will feel full and the silks should be turning brown.

Muskmelons do not get sweeter after picking. For full flavor leave them on the vine until a crack appears all around the point of attachment between the stem and melon. The free end should feel definitely soft when the melon is ready.

Avoid harvesting beans while the plants are wet with dew or rain, as moisture spreads disease.

## HAVE A COMPOST PILE

To assure having sufficient humus for your garden, start a compost pile. In a corner of your garden (perhaps behind a screen of bushes) dig a trench about 1 foot deep, 2 or 3 feet wide, and 3 or 4 feet long. Make frame extending above ground level.

Humus is decomposed vegetable or organic matter. In building a compost pile the idea is to accumulate such matter in a way that will encourage decomposition and increase its plant food value.

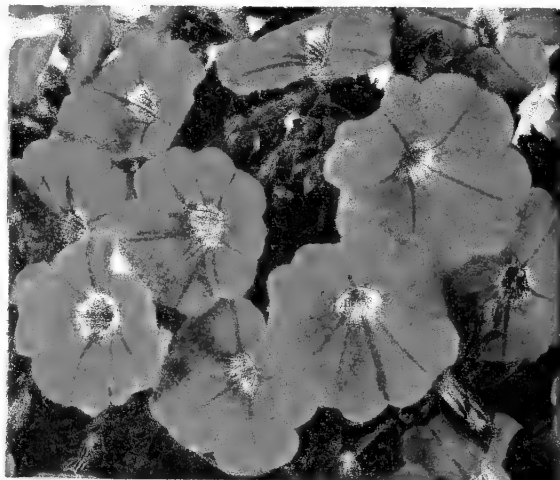
After you have a layer of material (grass cuttings, plant leaves, vegetable tops, straw, etc.) 6 inches or more deep, scatter over it a coating of chemicals to aid decomposition (sulphate of ammonia, superphosphate, limestone) and water well. Forking over occasionally and wetting well during the season speeds decomposition. Place a 1-inch layer of earth at about 6-inch intervals to prevent bad odors. (Avoid using diseased plants or weeds, which should be burned.)



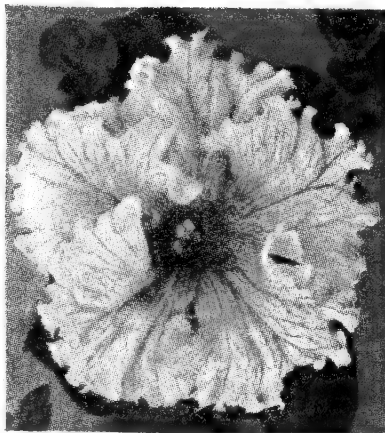
**COSMOS**  
Semi-Double  
Orange Ruffles



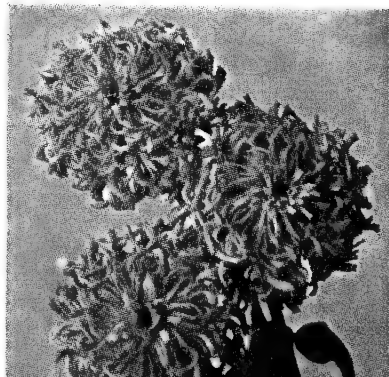
**COSMOS**  
Yellow  
Flare



**PETUNIA**  
Scarlet



**PETUNIA**  
Glamour



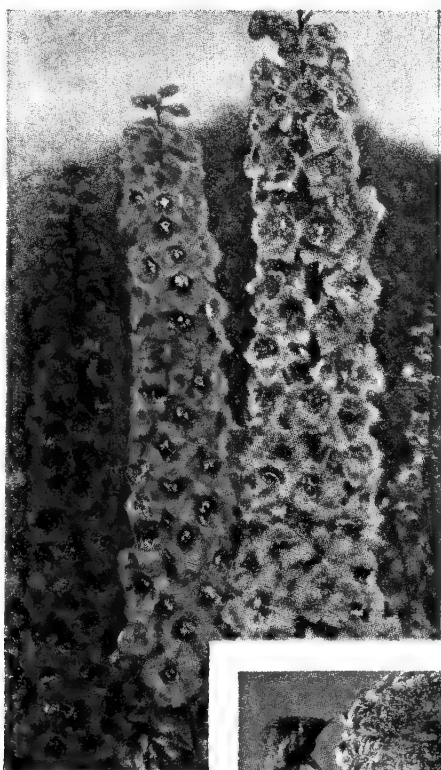
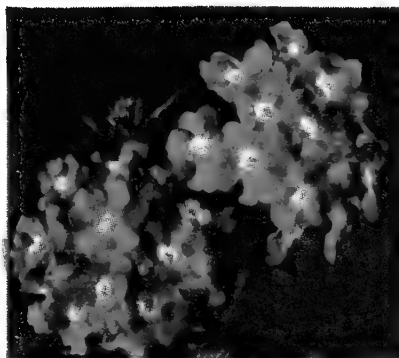
**ZINNIA**  
Fantasy  
Melody



**AQUILEGIA**  
(Columbine)



**VERBENA**  
*Brightness*

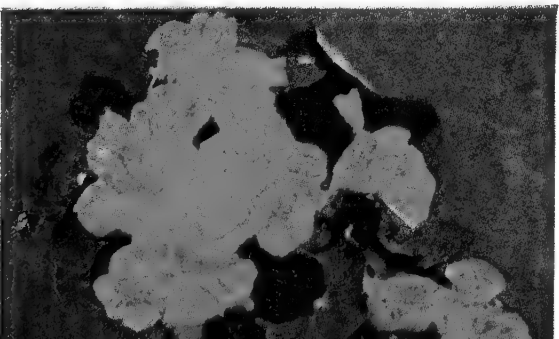


**DELPHINIUM**  
*Wrexham  
Giants*

**SCABIOSA**  
*Tall Double  
Mixed*



(Below) **NASTURTIUM**, *Golden Gleam*



# GARDEN GUIDE POSTS



## STORING VEGETABLES

Proper storage of root crops begins with planting, since they should just reach full maturity at the time frost is expected. (Maturity dates are given in each description.) Add 10 days to this for a margin of safety and then count back this period from the day killing frost can be expected. For example, Crosby's Egyptian beets mature in 60 days. If frost is expected Oct. 1st, then count back 70 days. This means that this variety should be planted for storage about July 20th.

In the case of cabbage, winter squash, pumpkins, onions and leeks, these should be planted 20 days ahead of the maturity dates given as they must be mature to keep well.

Never store bruised, rotting or imperfect vegetables. Quality decreases rather than improves with storage.

## METHODS OF STORAGE

**Beets, carrots, parsnips, salsify, turnips and rutabagas:** Best stored in sand that is moist but not wet. Temperature as close to 33 degrees as possible, but must not go above 40. Growth begins at 42 degrees, which will destroy sweetness. Don't store all the parsnips indoors: leave some in the open garden for spring use. Freezing improves the flavor of these.

**Cabbage, endive, celery and Chinese cabbage:** Dig with earth clinging to roots, set on floor of cellar or in cold frame with earth packed around roots. Keep roots moist but never sprinkle tops. Allow slight circulation of air. Temperature 33 to 40 degrees.

**Onions and potatoes:** Dry between 33 and 40 degrees. Potatoes can stand a little more moisture than onions. After coming out of cold storage, potatoes will be better if kept in a room at 55 degrees for 10 days before using to get rid of sweet taste that develops at low temperature.

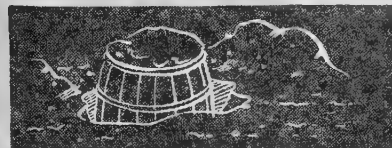
**Pumpkins, Squash, Sweet Potatoes:** Should be cured at 75 to 85 degrees for ten days, then kept in dry room at 55 degrees.

## FOR BETTER FLOWERS FROM SEED

**When and how to transplant:** When the plantlets have fully developed their second pair of leaves, or "true" leaves as they are called, it is best to transplant them either to flats about three inches deep or to small pots. Remove them from the seed bed gently to damage the roots as little as possible and plant somewhat deeper than they originally grew, so that the stems will be well supported.

**How to feed seedlings:** When the seedlings have reached the stage of transplanting they require more plant food than they had in the seed flat mixture. Mix one teaspoonful of complete fertilizer with each bushel of soil mixture to make it fertile. One bushel of soil will take care of a great many plantlets.

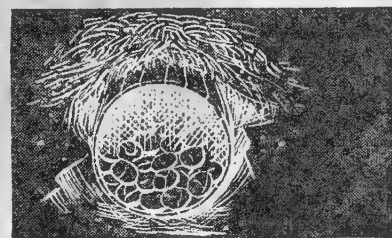
**Temperature and light:** The transplanted seedlings should be kept at



## WHERE TO STORE

**In House Cellar:** Partition off corner of basement and control temperature by letting in cold air thru window. Cement floors will have to be sprinkled regularly or kept covered with damp sand. Insulate ceiling if room is under living space. Screen and ratproof to keep out pests.

Before vegetables are stored, wash floors and walls with household chlorine solution (Purex, Chlorox or Linco) to destroy spores that might rot vegetables.



**Outdoors in Barrel:** A barrel half sunk into the ground or dug into the side of a hill can be used to keep root crops in sand. Cover any exposed part of the barrel with two feet of straw in severe weather to keep out frost. Don't put all one kind of vegetable in the bottom, etc. Pack in mixed layers, so that an assortment can be taken out without emptying the whole barrel.

**Cold Frame:** A well-built cold-frame can be used to store many vegetables. Cabbage, endive, celery and Chinese cabbage can be planted in soil and covered with straw. Root crops can be piled in one end mixed with sand and covered. Put on sash and cover with mats. If glass is not covered, sun will keep frame too warm on bright days.

a temperature of 45 to 50 degrees. If they are kept near a window, turn the boxes each day, otherwise the plants will lean towards the light and grow lopsided or spindling.

**The right soil:** Soil should be comparatively light in texture and preferably not too rich in plant food. One-third garden loam, one-third peat moss and one-third sharp sand will grow healthy seedlings.

**When re-potting is necessary:** As the little plants grow they may need to be shifted to larger pots to keep them in good growing condition up to the time the weather permits their being planted outdoors. This transplanting should be done when the roots have formed a mat around the inside of the pot. Usually it is best to change to a pot only one or two sizes larger than that in which the plant has been growing.

# GARDEN SUPPLIES

## "EROSIONET"

An inexpensive but strong, open-mesh fabric which is used in making new lawns where it is desirable to provide for the protection of young grass, or on steep banks where it will hold the soil and prevent washing and loss of turf by heavy rainfall. Also used for supporting Sweet Pea vines and shading cold-frames or perennial seed beds. 45 inches wide.

15c per linear yd., 100-yd. strips or more, 12c per linear yd.

## FLOWER HOLDERS

**Dome Type Nev-r-Tip.** Heavy cast alloy, non-rusting. 1 3/4 in. diameter, \$0.25; 2 1/2 in. diameter, \$0.35; 3 3/8 in. diameter, \$0.55.

**Pin Type Nev-r-Tip.** Constructed with a heavy cast alloy base supporting sharp, needle-pointed, solid brass pins closely arranged. Round, 1 1/2 in. diameter, \$0.25; Round, 2 1/4 in. diameter, \$0.40; Round, 3 3/8 in. diameter, \$0.75.

## GARDEN HOSE

**VISIT OUR STORE** for latest information and prices. We expect to be able to take care of your needs for garden hose, but cannot catalog definite qualities or prices because of the many uncertainties affecting this item.

## GRAFTING WAX

**Grafting Wax.** The best on the market. 1/4-lb. pkg. 25c, 1/2-lb. pkg. 35c, lb.-pkg. 55c.

**JARS (Preserving).** Pint and quart sizes, self-sealing, high quality, for all types of home canning and preserving.

**Cyclone Seed Sower**—Uneven seeding is wasteful. The "Cyclone" will sow many acres per hour, any amount per acre. Does the work quickly and saves labor. Many hundred thousands of farmers in America, Canada and Europe have relied on "Cyclone" for sowing clover, timothy, alfalfa, lespedeza, sudan grass, oats, wheat, or any other seed that is sown broadcast. Each \$3.00.

## Frost Can't Hurt Plants

Place **HOTKAPS** — patented paper hot-houses — over seeds or plants. Complete protection from destructive **FROSTS, STORMS AND INSECTS.** Ripen crops 3 weeks earlier; increase yield 18% to 51%. Maintain perfect mulch. Millions used by successful growers every season. Easy to set. 25 **HOTKAPS** for 50c. 100 for \$1.95. 250 for \$3.50. Setter free.



Germaco

# HOTKAPS

A GERMACO PRODUCT

## LABELS

**Metal Plant Markers.** Permanent metal labels, green enameled. 7 in. long, with white marking space 2 1/4 in. by 1 1/8 in. 12 for \$1.00; 25 for \$2.00; 100 for \$7.00.

**Wood Pot Labels.** The popular painted wood label for marking plants in pots or seed flats; 5/8-in. wide, 4-in. to 12-in.

	100	1000
4 in. ....	\$0.50	\$ 2.50
6 in. ....	.65	3.95
12 in. ....	1.75	13.95

**Wood Tree Labels, Wired.** Painted wooden labels equipped with wires, for marking trees or shrubs; also used extensively for labeling Dahlia tubers.

	100	1000
3 1/2 x 5/8 in. ....	\$0.65	\$3.80

## NOZZLES

**Plastic Hose Nozzle.** An adjustable, modernly designed red plastic nozzle. Light in weight, smooth finish, and adjustable to a complete variety of sprays and streams; also leak-proof shut-off. A very satisfactory substitute for the standard brass nozzle. Each 75c.

## LAWN SPRINKLERS

We have Lawn Sprinklers which vary in price from \$1.00 up. We cannot however, tell just what styles or types we may have from day to day, throughout the season.

## POTS AND ACCESSORIES

**Standard Earthen Flower Pots.** A wide range of sizes, from 2 1/2 in. to 12 in. diameter.

**Earthen Flower Pot Saucers.** 3 in. to 12 in.

**Red Paper Pots.** Made of water-proofed paper. Excellent for growing seedlings or for packing plants for shipment. Nicely finished and long lasting. 2 1/4 in. to 6 in. diameter.

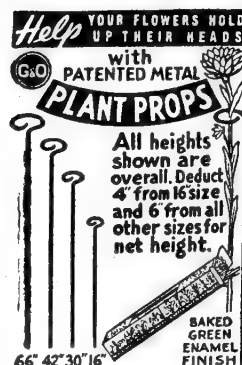
	Doz.	100	1000
2 1/4 in. ....	\$0.20	\$0.85	\$ 5.25
2 1/2 in. ....	.23	1.00	5.75
3 in. ....	.28	1.25	6.85
4 in. ....	.40	1.65	9.45
5 in. ....	.45	2.35	13.75
6 in. ....	.50	2.60	17.00

## SOIL TESTING

**Sudbury Soil-Test Kits.** Provide a simple method of determining the nitrogen, phosphorus and potash contents and also the degree of acidity. No knowledge of chemistry is needed. These kits are used by Government departments, commercial growers, and thousands of home gardeners.

Home Garden Kit (20 tests) .....	\$ 2.00
Club Model (50 tests) .....	4.75
Horticultural Size .....	9.75
Professional Size .....	18.50
Additional testing fluids: 2-oz. bottle, 75c; 6-oz. bottle, \$1.50.	

# METAL PLANT PROPS



"Out since Pearl Harbor . . . now available again"

Green enameled steel props that provide perfect support for all types of flowers and plants.

Plant Props are rot-proof, termite-proof, wear-proof! They can be saved from year to year . . . look good in any part of the garden . . . and cost very little.

16" size, 50c per doz.
30" size, 95c per doz.
42" size, \$1.20 doz.
66" size, \$2.00 doz.
78" size, \$3.00 doz.

"America's Darling of the Props"

## PLANT SUPPORTS

**Bamboo Sticks, Green-Stained.** These slim sticks are ideal for pot plants that require only light staking. Neat and inconspicuous.

	100	1000
18 in. ....	\$1.25	\$5.00
24 in. ....	1.40	7.00
30 in. ....	1.60	8.00
36 in. ....	1.75	9.50

**Dahlia or Garden Stakes.** Unpainted, square stakes made from Western Cedar.

	Doz.	100
4 ft., 3/4 in. square .....	\$1.95	\$13.50
5 ft., 3/4 in. square .....	2.50	16.50
6 ft., 3/4 in. square .....	2.95	20.50

**Garden Stakes.** Round stakes made from Western Cedar; stained dark green and pointed, the surface is ridged to prevent plant ties from slipping. Light weight, neat and almost rot-proof. 2 ft. to 8 ft.

## TYING MATERIALS AND DEVICES

**Raffia, Natural.** A palm-fibre used for tying plants, bunching vegetables, weaving, and basketry. 1/2-lb. pkg. 50c. In braids (uneven weights) just as pulled from the bale, 95c per lb.; 10-lb. lots and over, 85c per lb.

**Wayward Vine Guide and Support.** An efficient and practical device for training Ivy or other vines on brick, stucco, stone or cement walls without defacing the wall. The support consists of a small tab with a copper wire hook for holding the vine. The tab is very easily cemented into place and will remain indefinitely; not affected by any weather conditions. Available in three colors to match any wall—Red for brick, Gray or White for stone or cement. **Box of 25** (including cement) \$1.00.

## WATERING DEVICES

**Soil Soaker.** Puts water just where water is needed—right in the soil at the plant roots. The Soil Soaker is made of porous canvas. Attached to a garden hose it fills up and, under normal pressure, water seeps through every pore of its entire length, soaking directly into the soil. 12 ft. long, \$1.40; 18 ft. long, \$1.90; 30 ft. long, \$2.90.

# GARDEN TOOLS

At the time this catalog goes to press, there are still many uncertainties about the supply of garden tools. We have naturally done our best to gather an adequate supply of the tools you will need, and will be able to take care of most needs, but cannot promise complete assortments at all times.

(Prices are necessarily subject to change without notice)

## CULTIVATORS



**Speedy Cultivator.** Highly tempered steel tines, sharp and curved to penetrate the soil with an easy pulling motion. Excellent for cultivating under shrubs. 4 tines, 4½ ft. handle, \$1.20



**Victory Cultivator.** Strong, rugged tool with forged steel teeth, adjustable fastening. Fine for plots not large enough to need a wheeled cultivator. 5 tooth, 4 ft. handle, \$1.50



**Midget Cultivator Weeder.** Short handle, 3 small prongs. Indispensable for close-in work.

Visit our store for further selection.

## FORKS



**Spading Fork.** 4 angular back tines with polished face. Light weight. Bent handles, 11" tines, No. SD, \$1.60

**Manure Fork.** 4 polished oval tines 12½ in. long. Bent handle, No. A4, \$1.95



**Hay Fork.** 3 polished oval tines, 12 in. long. Bent handles, No. A34, \$1.60

Visit our store for further selection.



## REVOLUTIONARY HAND SPRAYER

New HARCO is only professional-type Sprayer priced so low. Long extension rod sprays up, down, sideways—quickly penetrates all hard to reach places—without adjustment. Easy to use. Attractive, colorful. Only \$2.35.

**HARCO SPRAYER**  
A Germaco Product

## GRASS HOOKS



Perfectly balanced; cutlery steel blade, hollow ground. Wood handle. 16 in. blade. No. 3, 60c.

## POTATO HOOKS



**Potato Hooks.** Four broad oval tines, tumbled. 4½ ft. handles. No. 4B, \$1.65

## HOES



**Field or Garden Hoe.** Full polished blade, 6½ in. wide, riveted to steel shank. 4 ft. handle. No. G6½, \$1.20



**Onion Hoe.** Full polished 6½ x 1¾ in. blade, 4½ ft. spring pattern handle. No. S6½, \$1.25



**Meadow Hoe.** Full polished 4 x 7 in. blade, 5 ft. handle. No. SB7, \$1.25



**Grub Hoe,** with handle. Size 4 x 7½ in. No. G7, \$1.30

Visit our store for further selection.

## KNIVES

**Asparagus Knife.** 10 in. forged steel blade, hardened and tempered, with V-shaped cutting point. 35c

**Budding, Propagating, and Pruning Knives.** Ask for available items.

## PRUNERS



Available supplies are limited. We will stock as full a line as may be obtainable. Visit our store.

## RAKES



**Rakes, Curved Tooth, Level Head.** 14 teeth on head 3¼ x 14¾ in. Heads ¼ in. thick. 5½ ft. handles. No. S14, \$1.30

**Wood Rakes** for lawns. 28 in. wide, 14 teeth, 6¾ foot handle, solid construction. Ask for prices.

Visit our store for further selection.

## SCYTHES

Made of best crucible steel, strongly ribbed, finished in black with polished cutting edge.

**Grass Scythe,** for lawn work, \$2.25

**Weed Scythe,** strong and stiff, \$2.25

**Bush Scythe,** for underbrush, \$2.25

## SHEARS

**Grass Shears.** Easy cutting action for trimming edges and borders. High quality steel, pinch-proof handles, easily operated. 12 in., \$1.00

Visit our store for further selection

## SHOVELS and SPADES

Assortments and supplies are limited and we cannot tell what styles and sizes we will have from day to day. We suggest that you visit our store to make your selection.

## TROWELS



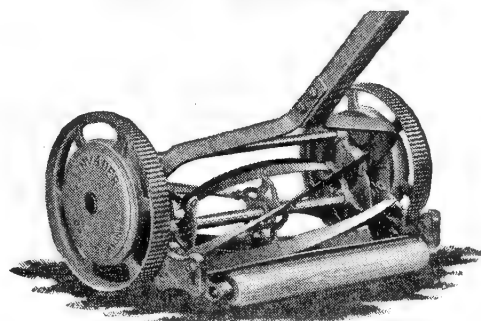
**All-Steel Garden Trowel.** Made of one piece of rigid steel, with shaped, ventilated handle. Polished blade. \$1.00

Visit our store for further selection.

**Weeders**—Various types of approved weed cutters and pullers. See these handy labor-saving tools.

**Turf-Edgers**—Indispensable for keeping lawns neat and trim. Several styles.

## LAWN MOWERS



Supplies are uncertain and we cannot tell what styles and sizes we will have from day to day during the season. We suggest that you consult us about mowers.

## OTHER TOOLS

If you need other garden tools than those listed here, we suggest you consult us. Uncertainty and shortage of supplies makes cataloging of tools very difficult, but a visit to our store will place our services at your disposal.



# INSECTICIDES AND FUNGICIDES

**ANT TRAPS**—For inside or outside of house. A safe container. (See Pest Exterminators.)

**ANT BAIT**—A bait that needs no feeders or traps. Easy to use in handy tubes. 1-oz. 35c; 3-oz. 85c. (See Pest Exterminators.)

**ARSENATE OF LEAD.** The standard insecticide for controlling practically all leaf-eating or chewing insects. Can be used as a spray or dust. 1 to 2 tablespoonfuls makes 1 gallon spray.

**BLACK LEAF 40.** Nicotine Sulphate 40% solution. For controlling aphids (plant lice), thrip and other soft bodied sucking insects. 1 teaspoonful makes 1 gallon. 1 oz. bottle 36c; 5 oz. \$1.05.

**BORDEAUX MIXTURE.** Standard copper fungicide for controlling black spot, mildew, blight, leaf-curl, scab and other fungous diseases on flowers, fruits, vegetables and other plants. 1 lb. makes 5 gallons. 1 lb. 35c; 4 lbs. 95c.

**CALCIUM ARSENATE**—Arsenate of Lead and Lime. A cheap quick-acting poison for potato bugs and other leaf-eating insects.

**CERESAN** — Effective in controlling covered smut and stripe of barley, oat smuts, and bunt or stinking smut of wheat. A pound treats 32 bushels. 4-oz. pkg. 30c; 1 lb. 80c; 4-lb. pkg. \$2.70; 25-lb. pkg. \$15.00.

**CYANOGAS "A" DUST.** Calcium cyanide for killing rats, moles, gophers, etc. Gives off deadly gas but leaves no poisonous residue. ¼ lb. can 25c; ½ lb. 45c; 1 lb. 75c; 5 lbs. \$3.00; 25 lbs. \$10.00.

**CYANOGAS ANT KILLER—A. Dust**—A dry powder to be blown into ant-hills, etc. 4 oz. can 30c.

**CYANOGAS—G. Fumigant**—The standard for greenhouses, mushroom houses, and for soil-fumigation. 5 lb. can \$3.00; 25 lb. can \$10.00.

**COPPER SULPHATE (or Blue Stone)**—Fine granulated.

**DORMANT OIL SPRAY**—A self-emulsifying spray-oil that kills scale aphids, psylla, red mite, leaf-hopper, and certain other insects that overlive Winter on trees. The only effective control for scale insects. Will not injure paint.

**DOG-CHECK**—An effective proven curb to canine habits, needed by all whose neighbor's dogs "visit" and wither flowers, shrubs and saplings. One spraying usually lasts from two to three weeks—unaffected by light rains. Each package contains 6 DOG-CHECK APPLICATORS. 60c and \$1.00 retail sizes.

**FISH-OIL SOAP**—An old fashioned remedy for sucking and scale insects.

**MOLE KILLER**—See Pest Exterminators.

**MOUSE POISONS**—See Pest Exterminators.

**NAPHTHALENE FLAKES**—Frequently mixed with soil in greenhouses and gardens to destroy slugs and wire-worms. Also useful in controlling thrips on gladiolus bulbs.

**NICO-FUME LIQUID**—A greenhouse fumigant and spray material. 1 lb. can \$2.50; 4 lb. can \$7.10; 8 lb. can \$13.00.

**NICO-FUME POWDER**—A greenhouse fumigant for the control of numerous insect pests. ½ lb. and 1 lb. size packed in pressure fumigator containers. ½ lb. tins 60c; 1 lb. tins \$1.00; doz. \$9.00.

**RAT POISONS**—See Pest Exterminators.

## FLEA-NOT

Kills fleas, lice and other parasites that infest the skins of dogs and other pets. Absolutely harmless to the skin of animals. Easy to use. Put up in an attractive shaker top can. 25c Retail Size.

## Acme Scientific Rose and Flower Spray



A "system" of spray treatment for roses and flowers of all kinds. Eliminates guess work. Each set contains three separate items — each scientifically made to combat one of the three major classifications of blight and insect pest. Mix all three together with water. Use regularly. Result: complete all-around protection. Surprisingly economical.

Sizes	Amount of Spray	No. of Roses Protected all season	Prices
No. 3..12 qts...	7 to 12 bushes...		\$0.95
No. 6..24 qts...	15 to 25 bushes...		1.50
No. 24..96 qts...	60 to 100 bushes...		4.00
No. 48..48 gals...	120 to 200 bushes...		6.00
No. 96..96 gals...	240 to 400 bushes...		9.75



**ACME ROTENONE GARDEN GUARD** is an ideal insecticide for the home garden. Dust or spray. The killing ingredient is Rotenone — non-injurious to human and warm blooded animals. Acts both as contact and stomach poison against a wide range of insects. 1 lb. sifter carton, 35c. 1 lb. pump gun. 60c.



**ACME RED RIVER POTATO MIX**—dust or spray. A scientific formula combining a patented copper fungicide with quick-killing arsenic.

Kills potato bugs quicker—drives off flea beetle and leaf hopper—prevents blight—stimulates foliage. Get top prices for your harvest.

**ROTENONE GARDEN SPRAY (NNOR)**—see Sucking Insects.

**ACME TOMATO DUST**—see Blight and Fungus.

**ACME VEGETABLE AND FLOWER GARDEN DUST**—see Sucking Insects.

**ACME APHIS SPRAY**—see Sucking Insects.

**PARIS GREEN**—see above.

**ARSENATE OF LEAD**—see above.



**ROTENONE GARDEN SPRAY (NNOR)** containing Rotenone kills most common garden bugs of both sucking and leaf eating types. You've got to wet them—to get them. NNOR penetrates the waxy or hairy covering, brings the tremendous power of Rotenone into action. 1 oz., 35c; 6 oz., \$1.00; 16 oz., \$2.15; Gals. \$13.50.



**ACME EMO-NIK** is a valuable spray for the control of scale, red spider, mealy bug, white flies, rust mites, aphids, and many other common insects. A complete contact insect spray combining nicotine in its most active form with Emo, a high quality summer oil emulsion. Practically odorless when

sprayed. 4½ oz., 35c. Pint, 65c. Quart, 95c. Gallon, \$2.50.

**ACME APHIS SPRAY** combines a soft spray soap with Black Leaf 40. Recommended for aphids (plant lice), thrip, leaf hopper, and many more hardy insects infesting rose bushes, flowers, shrubs, vines, bushes, and trees. 3 oz. collapsible tube 35c. 12 oz., \$1.00. 2½ lbs. \$2.35.



**ACME VEGETABLE AND FLOWER GARDEN DUST.** A dust or spray containing nicotine for many common varieties of sucking insects, and arsenicals for leaf eating insects for the home vegetable and flower garden. 1 lb. cartons, 40c. 4 lb. bags, 1.10.

**ACME ROTENONE GARDEN GUARD**—see Chewing Insects.

**LIME SULPHUR**—see above.



**ACME TOMATO DUST** is especially prepared to control blight and worms preying on tomatoes. While specifically designed for tomatoes, it also is equally effective in the control of leaf chewing insects and blight on many other vegetables such as potatoes, cucumbers, beans and cabbage, also many flowers as roses, azalea, evergreens, asters, and hollyhock. 1 lb. sifter carton, 35c. 1 lb. pump gun, 55c. 4 lb., 80c. 50 lb., \$9.00.

**ACME KOPPER QUEEN (Mildew Spray)** is a stainless liquid copper spray for the control of mildew, leaf spot, and black spot on rose bushes, flowers, and many other kinds of foliage. Leaves no unsightly residue. A liquid spray replacing Bordeaux Mixture and Sulphur. ½ pt., 35c; Pint, 60c; Qt. 90c; Gal., \$2.25.

**ACME WETTABLE DUSTING SULPHUR** is an improved dusting sulphur for home use which can also be used as a liquid spray. Controls red spiders on evergreen, mildew, leaf spot, black spot, and rust on rose bushes, chrysanthemums, snapdragons, carnations, and certain other foliage. 98% passes through a 325 mesh screen. An excellent chigger chaser.

**ACME RED RIVER POTATO MIX**—see Chewing Insects.

**BORDEAUX MIXTURE**—see above.

**PARIS GREEN.** An effective insecticide for control of chewing insects, particularly recommended for potato bugs. ¼ lb. 20c; lb. 55c.

**POTATO MIX** — See "Chewing Insects."

**RODENT KILLER—Molite**—The new gas type cartridge for killing moles, rats, gophers and other underground rodents. Simply light fuse and place in runways or tunnels. The poison gas brings quick death to rodents. Non-explosive, non-inflammable. Safe to use. 15c each; \$1.50 doz.

**ROTENONE DUST.** The greatest advancement in years in the insecticide field. Rotenone is a non-poisonous dust that effectively controls nearly every kind of insect, whether chewing or sucking. Particularly recommended for bean beetles, cabbage worms, aphids. Offered only for vegetables in accordance with W.P.B. ruling.

**RED ARROW GARDEN SPRAY**—A highly concentrated Pyrethrum and Rotenone extract containing soap, spreader and sticker. Harmless to animals. 1 oz. 35c; 4 oz. \$1.00; 1 pint \$2.85; 1 quart \$5.00; 1 gallon \$17.00.

**SEMESAN** — Effective in controlling damping-off, scab, hard rot, etc. 2 oz. can 40c; 1 lb. can \$2.50; 5 lb. can \$11.40; 25 lb. can \$52.50.

**SEMESAN BEL**—For use on potatoes. Controls such seed-borne disease organisms as scab, rhizoctonia, and black-

leg. One pound treats 16 to 20 bushels of seed. 2 oz. 30c; lb. \$1.65; 5 lbs. \$7.15; 25 lbs. \$33.25.

**SEMESAN JR. (New Improved).** Disinfects corn against ear rot and stalk diseases. 2 oz. treats 1 bushel seed corn. 1½ oz. 15c; 1 lb. 75c; 5 lbs. \$3.00.

**SLUG SHOT.** Famous non-poisonous dust for killing potato bugs, cabbage worms and lice and other insects and worms on vegetables. 1 lb. 30c; 5 lbs. \$1.25; 25 lbs. \$5.50.

**SULPHUR, DUSTING**—For controlling powdery mildew, blight, black spot, rust and most rose diseases.

**SULPHUR, WETTABLE** — An improved sulphur which can also be used as a liquid spray. 98% passes through 325 mesh screen.

**TOBACCO DUST, Gold Leaf**—Finely pulverized. Used for dusting plants to repel various insects. Guaranteed to contain not less than 1% nicotine by weight, dry basis.

**TREE TANGLEFOOT**—Perfect safeguard for trees, vines, and shrubs against gypsy, brown-tail and tussock moths, canker worms, ants, and other creeping insects. 6 oz. can 45c; 1 lb. can 80c; 5 lb. can \$3.75; 10 lb. can \$7.00; 25 lb. can \$15.00.

**VOLCK, Nursery**—An insecticide effective against mites, scale, red spider and mealy bug, and when combined with "Black Leaf 40," Volck also controls thrips, lacy-wing fly and chrysanthemum midges. ½ pt. can 35c; pt. can 50c; qt. can 75c.



**Spray with**

## BLACK LEAF 40

Aphis (plant lice), leafhoppers, leaf miners, mealy bugs, lace bugs, most thrips, young sucking bugs and similar insects can be controlled.

An ounce makes 6 gallons of spray effective on aphids. Full directions with package—A quick, sure, economical control for these insect pests.

Just a little spread on roosts kills poultry lice and feather mites.

## ZOTOX CRAB GRASS KILLER

Destroys Crab Grass in lawns without permanent injury to lawn grasses. Also kills Chickweed, Spurge, Dandelion, Plantain and many other lawn weeds. A 16 oz. bottle makes 10 gallons and treats up to 2000 sq. ft. Price: 8 oz. bottle \$1.00; 16 oz. \$1.50; 32 oz. \$2.50; 5 lb. \$4.50.

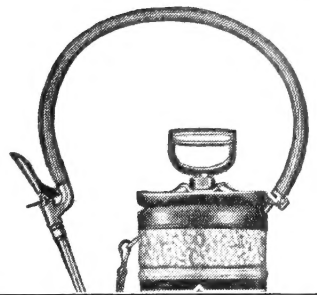
## TRI-GEN FOR ROSES

**TRI-GEN SPRAY**—three way treatment for roses and most vegetable plants. Used and highly recommended by leading rosarians. Controls insects and fungus, assuring healthy, strong and vigorously blooming roses. E Kit 90c; A Kit \$1.50; B Kit \$4.00; C Kit \$6.00; D-Estate kit \$20.00

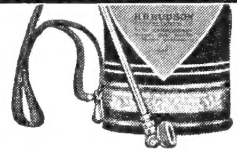
**TRI-GEN DUST**—a perfected dust for three-way control of insects and fungus diseases, for those who prefer to dust. Especially good for roses but useful on all flowering and vegetable plants. 1 lb. 65c; 5 lbs. \$3.00

## WEEDONE

The new scientific weed killer. Kills Poison Ivy, Poison Oak, Bindweed, Jap. Honeysuckle, other noxious weeds. Sprayed on leaves it travels down and kills right out to the root tips. Non-irritating, non-corrosive, contains no arsenic or chlorates. Just mix in water and spray.  
6-oz. bottle (covers 300 sq. ft.) \$1.00—1-qt. bottle (covers 1500 sq. ft.) \$4.00—1-gal. bottle (covers 6000 sq. ft.) \$12.00—5-gal. can (covers 30,000 sq. ft.) \$55.00.



## SPRAYERS and DUSTERS



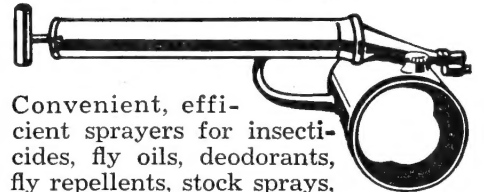
The supply of garden sprayers is still critical, but we hope to be able to take care of your needs.

Good spraying equipment is vital to the success of the garden, so we are making every effort to maintain our supplies for you. Consult us on all types of spray equipment.

### Compressed Air Tank Sprayers

Open top or funnel top, 2 to 4 gallon sizes, for all types of farm and garden spray work, whitewashing, etc. Easy to fill, easy to clean.

### Continuous Sprayers

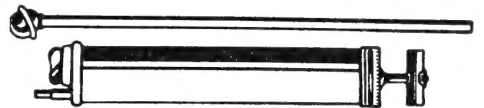


Convenient, efficient sprayers for insecticides, fly oils, deodorants, fly repellents, stock sprays, etc. For farmer, gardener, poultryman.

### Light Hand Sprayers

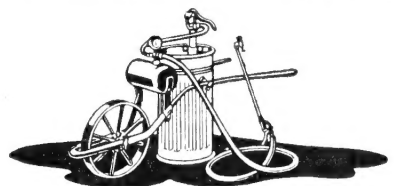
The right models for the back yard garden, chicken house, etc. (Supply is short, but we can probably take care of you.)

### Dusters



Various models, made to handle any powdered insecticide, with any desired discharge from a very fine to a very heavy cloud. Heavy duty models for truck farms, orchards, etc. Lighter models for the garden.

### Wheelbarrow Type Sprayers



Heavy duty portable outfits for orchard, farm, and industrial work. Consult us about models available.

### Bucket Spray Pumps

Bucket or barrel types for whitewash, cold water paints, insecticides, caustic mixtures, etc. Consult us about models available.



# ROOTONE

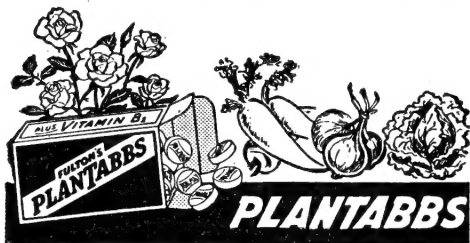
Reg. U. S. Pat. Off.

## The Plant Hormone Powder

This nationally known hormone powder makes cuttings root faster and more successfully. It stimulates seed germination so that rooting is heavier and you get a better stand of seedlings. Endorsed and used by leading growers everywhere. **Trial packet 25c—2 oz. jar \$1.00—1 lb. can \$5.00.**

# TRANSPLANTONE

Reduces shock and wilt when plants are moved. Produces earlier maturity on tomatoes, lettuce, celery, peppers, tobacco and cabbage. Used on plants, shrubs and trees it encourages growth and bloom. One teaspoonful of powder makes 10 gallons of solution. **Trial packet 25c—1 oz. can 50c—3 oz. can \$1.00—1 lb. can \$4.00.**



## MEET THE NEW, IMPROVED PLANT FOOD WONDER!

The same inexpensive Plantabbs with full pre-war quota of Nitrogen

You can't beat Plantabbs for growing bigger, better garden flowers, potted plants and vegetables. They're ready for you now in new, WHITE tablet form. Each tablet contains a full, rich meal of Nitrogen, Phosphoric Acid, Potash (11.15.20) plus Vitamin B<sub>1</sub>. They're clean, odorless, safe and easy-to-use. Just push a tablet into the soil alongside each plant every 10 days. The usual watering or rain will quickly dissolve it. If you prefer liquid, simply drop 4 tablets into 1 gallon of water, and there you have it. No matter how you use Plantabbs, you'll be amazed at the difference they make in your plants. Start feeding your potted plants, garden flowers and vegetables by this modern, convenient method. If you don't get wonderful results, you'll get your money back. The new, improved Plantabbs come in four economical sizes — 25c, 50c, \$1, \$3.50.

**FULTON'S PLANTABBS**  
Odorless Plant Food Tablets

# PLANT FOODS

While there are still some wartime restrictions on the manufacture and sale of fertilizers, the situation is greatly improved. This spring there should be plenty of suitable fertilizer for every home garden.

## Ask us about it!

Whatever your needs for plant foods may be, consult us about them. We'll see to it, as usual, that your garden and lawn get the food-help they need.

**ALUMINUM SULPHATE** — A material used in creating acid soils necessary for successful culture of Azaleas, Rhododendrons, and similar plants.

**ASHES, HARDWOOD** — High potash content. Contains all of the fertilizer elements except nitrogen. Tends to drive away insects.

**BACTO** — Converts leaves, grass clippings, table scraps, etc., into rich fertilizer-humus in a few weeks. 5-lb. treats half a ton.

**BONE MEAL** — All-purpose fertilizer, rich in the two principal plant foods—nitrogen and phosphoric acid.

**FRUITONE** — The remarkable hormone spray that stops pre-harvest drop of fruit. Sprayed on flowers of tomatoes it makes a high percentage of the crop **SEEDLESS!** Also beneficial on beans and on flowers.

**HUMUS** — One of the best soil conditioners. Makes soil more workable and helps it hold moisture. Not a substitute for fertilizer, but an excellent companion for it. In convenient sized packages.

**LIME (Hydrated)** — Sweetens sour soil for lawns, and clover. Is used as a reducer and in combination of many insecticides; for whitewash, deodorizing.

**MURIATE OF POTASH** — Improved Potash. Used liberally for all root crops.

**NITRATE OF SODA** — Very quick source of nitrogen. Hastens maturity of crops. Should not be applied until plants are well above ground.

**PLANTABBS** — Clean white odorless plant tablets for indoor or outdoor use, combine high analysis food value with a plentiful supply of Vitamin B-1.

**PEAT MOSS** — Fine for garden mulch, as it conserves moisture. When incorporated in the soil, it promotes growth and supplies humus, which is very essential for growing plants. Fine winter protection for lawns; also as a mulch on strawberry perennial beds, roses, evergreens, etc.

**SHEEP MANURE** — An economical and effective balanced plant food. Excellent for lawns, gardens and general use.

## SOIL TEST KITS

Do your own soil testing! Kits are simple, practical, easy to use. Let you determine just how to fertilize and lime for best results. Complete kit, good for 20 individual tests, \$2.00.

**SULPHATE OF POTASH** — Highly recommended for plants requiring acid soil.

**SUPER PHOSPHATE** — Aids plant nutrition and assists the plant to assimilate other ingredients. An efficient fertilizer element for lettuce, truck crops, cereal crops and alfalfa.

**TOBACCO STEMS** — Used as a mulch for roses, asters, lettuce, etc., and for fumigating plants to kill insects.

## G & O ROSE FOOD



... at last, a real organic, no-filler fertilizer, ESPECIALLY FOR ROSES!

You can't feed roses a "good-for-everything" commercial food and get the color, size of bloom and stock you want!

G & O Rose Food is specialized — a balanced combination of ORGANIC ingredients — selected for the particular "make-up" and sequence availability that roses need. TRY IT — and see what a difference it makes!

1 lb., 20c; 5 lbs., 65c; 10 lbs., \$1.25; 25 lbs., \$2.65; 100 lbs., \$9.60.

For better color, size, strength

## Stretches Fertilizer!

Amazing! BactO will multiply 1 lb. of chemical fertilizer into 60 lbs. of better, non-burning organic-type fertilizer. Easy! Quick!

### Hastens Compost

Don't burn leaves! BactO makes rich fertilizer-humus from leaves, table scraps, grass clippings—even sawdust!—in a few weeks. 5-lb. treats ½-ton.

**BACTO** also activates hot beds and pot soils; reduces odor in outdoor toilets—a bacterial product of many valuable uses. (Made by Jean Maclean, Bridgeport, Ind.)

5-lb. 1.69 25-lb. 5.49

Ship. wt. 6 lbs. Ship. wt. 27 lbs.

Trial can, 25c 3 for 71c



# FRUITONE

REG. U. S. PAT. OFF.

**FRUITONE**, the hormone spray for stopping premature drop of fruit, flowers, and leaves. Sprayed on flowers of tomatoes or beans, it produces better set, larger crop, and high percentage of seedless tomatoes. Makes Christmas greens hold their leaves longer. **2/5-ounce packet, 25c. 2-ounce package, \$1.00. 12-ounce can, \$5.**



**ROOTONE**—You can help cuttings to root faster by dipping them in the hormone powder, Rootone, before planting. Percentage of successful rooting is increased remarkably by this new treatment.

**TRANSPLANTONE** — Remarkable new Vitamin-Hormone stimulant effective in reducing transplant shock, and wilt of all kinds of plants or shrubs. Also effective in bringing about earlier maturity on tomatoes, lettuce, celery, peppers, tobacco and cabbage.

**LEGUME INOCULATION** — Just as necessary for garden peas and beans, lima beans, sweet peas and lupines as for alfalfa, clover, etc. The nitrogen-gathering bacteria build up the soil, increase your yields. Inoculation is the cheapest form of crop insurance. Packages from the 10c garden size up to 5-bushel size.

## FEEDING THE GARDEN

• How much fertilizer? In general, the use of from 25 lbs. to 35 lbs. of a good general fertilizer like 4-12-4 or 5-10-5 to every thousand square feet of garden space will take care of all the needs of most plants.

• The addition of compost will make soil easier to work and add certain minor elements not available in commercial plant foods.

• Sheep or other animal manures are particularly valuable in sandy soils because they add soil bacteria usually missing in such soils.

• In growing root crops and bulbs the use of 4 to 5 lbs. of muriate or sulphate of potash to every 1,000 square feet will make for firmer bulbs, tubers and roots. Wood ashes can be substituted for these (except on potatoes, where the higher lime content of wood ashes encourages scab), applying 12 lbs. per 1,000 square feet.

• When seeds are planted at temperatures below 42 degrees (i.e. lettuce, spinach and grass seed sown in early spring) the treatment of the seed with **ROOTONE** supplies hormones that substitute for the natural plant hormones which are not active at low temperatures.

## Notes on

### INSECTS AND DISEASES

It is not possible to give complete directions for spraying for insects and diseases, but if you can bring in a specimen showing the difficulty we shall be glad to do all we can to recommend a suitable spray or dust.

• Chewing insects cut or tear out pieces of leaves or stems. They are killed by stomach poisons like calcium arsenate, arsenate of lead or Paris Green. When the insects are on plants that are to be eaten, Rotenone or Pyrethrum are safer, but do not always give as complete control, as the insects themselves must be hit directly.

• Sucking insects stab the stem or leaf and suck out the plant juices and cannot be poisoned through their stomachs. They are smothered by sprays or dusts that paralyze their breathing apparatus. Rotenone, Pyrethrum and Nicotine Sulphate are commonly used for this purpose.

• Fungicides control most plant diseases, which are caused by fungi or moulds. Bordeaux mixture, dusting sulphur and lime sulphur are used for this purpose, while for seeds and potato tubers, organic mercury compounds like Semesan give good results.

• Compound spray materials are valuable in the smaller garden, since they combine fungicides and insecticides, or materials for controlling both chewing and sucking insects.

• **CAUTION:** Always use insecticides as directed on the package: never stronger than recommended. Avoid using materials containing sulphur when the sun is shining brightly and when the air temperature is above 80 degrees, as they will burn badly at temperatures above this point.

**WHEN IN DOUBT, ASK US!** Whatever your questions about insect pests or plant feeding—don't hesitate to consult us!

## A Dry Bath for your dog



Avoid the fuss and muss of bathing your dog by cleaning quickly, efficiently and thoroughly with Sudbury Hygienic Cleaning powder. Recommended by authorities . . . helps rid fleas and mites . . . leaves coat soft and silky. Giant size, \$1.00.

**Liquid Chaperone, \$1.00** — Keeps dogs away from flowers, shrubs.

**Powder Chaperone, \$1.00** — Keeps dogs off furniture.

## HYPONEX PLANT FOOD

Grows bigger and better house plants, flowers, vegetables, lawns and trees in poorest soil—even in sand, cinders, or water. Results are sure—it doesn't burn.



Clean, odorless, soluble powder—complete and balanced.

1 oz. package . . . . .10c (makes 6 gallons)

3 oz. package . . . . .25c

1 lb. package . . . . .\$1.00 (makes 100 gallons)

Available in drums, write for prices.

## DOES YOUR DOG Itch.. Scratch?



Don't Blame Fleas, Mange or Diet . . . 2 to 1 It's "Fungitch" Amazing New Sulfadene Eliminates Canine Skin Infection Long a Puzzle to Science

IF YOUR dog or cat scratches, it probably has "FUNGITCH" . . . a fungus infection caused by contact with mouldy grass and weeds. "FUNGITCH" starts as an itch . . . then leads to dandruff-like scales or sores with brownish edges, mouldy odor—or infection in ears, on paws, underbody, tail or eyes . . . resulting in something more serious, expensive care, or actual loss. Treatment of 3,121 dogs and cats—at Dr. Merrick's Animal Hospital—reveals **SULFADENE** stops itching quickly, clears up sores in a few days. To relieve your pet apply **SULFADENE** externally at first sign of "FUNGITCH." Only 98c for generous treatment. Guaranteed.

**Dr. MERRICK'S SULFADENE**

## PEST EXTERMINATORS . . . "Their Last Meal"

**ANT-X JELLY BAIT**—A most effective bait for destroying all species of ants—**SIMPLE TO USE**—Not a repellent but a food bait that ants eat and carry back to the nest. Destroys entire colony. "THEIR LAST MEAL." 35c and \$1.00 retail sizes.

**ANT-X ANT TRAPS**—A safe, sanitary method for controlling ants in house and garden. Attracts and destroys both sweet and grease-eating ants. Cannot be opened by children or spilled by pets. ANT-X TRAPS may be placed inside ice-boxes or other food containers without contaminating foods. "THEIR LAST MEAL." 25c retail size.

**RAT-NOTS**—A non-poisonous prepared bait containing genuine **RED SQUILL**. A safe, sanitary way to exterminate rats. Rats are attracted to RAT-NOTS because of their tempting odor. "THEIR LAST MEAL." 25c and \$1.00 retail sizes.

**MOUSE-NOTS**—A meaty, easily hulled, treated seed bait which appeals to the finicky taste of mice. Simply spread in places where mice frequent. "THEIR LAST MEAL." 25c and \$1.00 retail sizes.

**ROACH-NOTS**—A prepared powder bait, quick and effective. ROACH-NOTS "Lays them on their backs." Also quickly kills waterbugs and silverfish. "THEIR LAST MEAL." 25c and \$1.00 retail sizes.

**MOLE-NOTS**—Life-saver for lawns, flower and seed beds. Sure death to bulb-eating, root-destroying moles. MOLE-NOTS safeguard bulbs when placed in ground at time of planting. "THEIR LAST MEAL." 35c, \$1.00 and \$2.00 retail sizes.

**RAT-NOT-PASTE**—Recommended for big, well-fed, hard-to-catch rats which dodge cats and traps,

and are finicky in their eating habits due to easy access to tasty-garbage, and feed and food warehouses. Ideal, too, for control of chipmunks, squirrels, prairie dogs, etc. "THEIR LAST MEAL." Packaged in handy, convenient tubes. 35c and \$1.00 retail sizes.

**SKEET-CHECK**—An ointment repellent, packaged in convenient handy tubes, easy to apply and pleasant to use. Unexcelled for repelling mosquitoes, gnats, black flies, deer flies and other annoying insect pests. SKEET-CHECK is also an excellent soothing salve that will help to allay swelling when bitten. 35c retail size.

**KILMICE**—A treated, tasty, impregnated seed bait which quickly destroys mice in house and garden. Easy to use; clean, sanitary, no mixing—no traps needed. "THEIR LAST MEAL." Large 2½ oz. package 25c.

**Complete Garden Service—AT OUR STORE OR BY MAIL**

# **GEO. KELLER & SONS**

**HEADQUARTERS FOR GARDEN SUPPLIES**

**909 MAINE STREET**

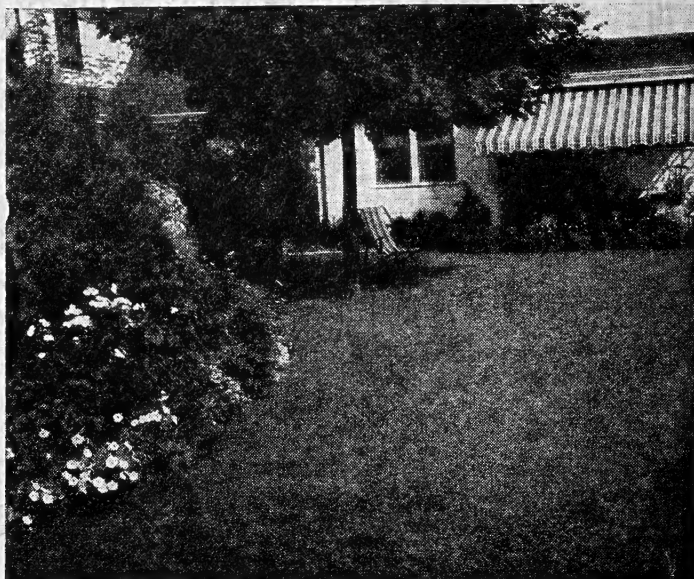
**QUINCY, ILLINOIS**

## *Keller's* **LAWN SEED**

**Pure Seed**

**Best Quality**

**Highest Germination**



The finest quality of best known grasses of high germinating seed are used as the foundation of Keller mixtures. They are blended and mixed in proper proportions to meet local conditions.

### **Keller's BEST MIXTURE**

This special mixture is proportioned and blended to produce beautiful, permanent lawns. *Highly recommended by lawn authorities for this locality.*

### **Keller's SHADY LAWN MIXTURE**

A very high grade blend of shade-tolerant grasses, skillfully proportioned so that you may get the very best possible results in shady spots.



**VISIT OUR STORE! THE MOST  
COMPLETE SEED STORE  
IN ILLINOIS**

### **Garden Accessories**

Despite the general situation, you will find that we have a choice assortment of accessories for your garden; Hoes, Rakes, Garden Plows and a wide range of many other garden accessories and garden pottery.

### **Keller's Dog Department**

Have you visited our dog department? It's the handiest place in town to get Dog Food, Remedies, Beds, Toys and Supplies. Drop in and see us. You will find just about anything you want for your dog.